

Projections and Planning Information

**UPDATES
FOR
ALAMEDA COUNTY**

Replace Module D: Projections

EMPLOYMENT DEVELOPMENT DEPARTMENT

LABOR MARKET INFORMATION DIVISION

FOR QUESTIONS ABOUT THIS REPORT, CALL (916) 262-2162.

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Module D: Industry and Occupational Projections

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Standard Industrial Classification Manual (SIC)

Standard Occupational Classification System (SOC)

North American Industry Classification System (NAICS)

Projection Methods and Economic Assumptions

Alphabetical Index of Occupations

Introduction to Projections

Using Projections Data

Projections contained in these tables provide information for estimating job opportunities, developing training programs, and gaining insight into employment trends. However, before reaching any final conclusions, users should consider the following:

Remember that these data are estimates. They were developed on the assumption that historical trends will continue into the future. However, events may occur during the seven-year projection period that are impossible to predict. Events such as military base closures, major business closures or openings, and natural disasters can have a major impact on employment levels.

Do not use these projections as your sole source of information. Use other more recent sources of local economic data to corroborate the projection data. This information may be found in documents such as those published by the EDD's Labor Market Information Division, local chambers of commerce or economic development agencies.

Projections employment data are annual averages. These averages may not accurately portray seasonal occupations or industries such as those found in agriculture, retail sales, recreation and construction.

Employment levels stated reflect workers who are covered by the Unemployment Insurance program. As a result, industries that are made up largely of individuals who are self-employed will be understated. Examples include industries such as real estate, hair salons and bookkeeping. Occupations such as dental hygienists and consultants will also show an understated level of employment.

Industry Projections

Projections by industry forecast the anticipated changes within an industry over time. Forecasts are based on past employment trends and then are refined by a review of current economic developments.

Industry employment projections utilize employment data from both the Current Employment Statistics (CES) program and the Employment Payroll (ES202) program. There is a certain amount of error built into both systems. These errors may include employers classified in the wrong industry, incorrect employment levels reported by the employer and employment reported in the wrong county.

If a major industry category shows a decrease in future employment, it may be that only one or two industry components are experiencing the decline and other components are still expected to hire new workers. It is best to investigate all sectors of the industry. For example, retail trade has several components: building materials and garden supplies; general merchandise stores; food stores; automotive dealers and service stations; and apparel and accessory stores, to name a few.

Geographical differences account for differing employment opportunities. If an individual is considering relocating from one area of the state to another, the size of the industry and its expected growth level need to be kept in mind. Small rural counties will not have the same employment possibilities as do the larger metropolitan areas.

Knowing Future Industry Trends

- helps economic development professionals foster compatible growth and promote an area's strengths.
- helps government agencies, non-profit agencies, researchers and other interested parties formulate plans and proposals.
- helps people seeking work and those doing counseling and/or job placement learn about employment opportunities in various industries.

Occupational Projections

Projections by occupation estimate the changes in occupational employment over time resulting from industry growth. Changes in the number, size and type of employers within a geographical area will affect the demand for certain occupations. Also, technological advances or changes in laws or regulations may affect the occupational mix.

General changes in the work place affect some occupations. Jobs may be created, eliminated or consolidated due to restructuring or regulations affecting the requirements for the job. For example, personal computers and word processing programs eliminated many typist jobs, but created a need for word processors.

An occupational title does not give details about the occupation. An individual starting a career search may want to look at the various occupations in this module, choose any that are of interest and then do further research. There are other sources of information for

occupations and their specifics, such as skills and educational requirements, hourly earnings, benefits, working conditions and advancement opportunities.

Occupational staffing patterns used for the projections process are developed from the annual OES Survey of employers. The survey utilizes a sample of the entire universe of Unemployment Insurance (UI) covered employers. Because it is a survey, it is important that the following points be considered:

- There is inherent statistical error as a result of both the sampling process and the level of employer response to the survey mailings.
- OES staffing patterns may contain errors due to problems employers may have in completing the survey. These errors typically include: misunderstanding of survey instructions, misinterpretation of occupational definitions and/or titles contained on the forms, and clerical errors in filling out the forms.
- The employer's response to the survey may reflect conditions that are atypical. They may be experiencing a temporary shutdown, seasonal high or low employment, or a temporary increase in demand for their product or service.

Occupational projections data indicate major occupations and which occupations are likely to offer the greatest number of job opportunities. When possible, the user should focus on larger groups rather than specific occupations. Some occupations may not appear in published tables because of the low number of people employed in that area or because of confidentiality concerns.

Although an occupation may be stable and not expected to grow, this does not mean that there are no opportunities for employment. All occupations have turnover opportunities. Individuals change or leave jobs permanently for varying reasons. High turnover, especially in occupations requiring lower skill levels, would mean that there are frequent openings even though there is little or no growth.

Occupational projections data are prepared for employment and training planners, vocational educators, and others who need information on future employment by occupation. The outlook information can be used in making occupational training decisions and career choices. Employers considering expansion or relocation may find the data helpful in understanding the occupational composition and trends in California and its 58 counties.

Additional Sources of Information

Additional information on economic conditions in a particular area can be accessed through Labor Market Information Division consultants, who provide information about economic activities within the counties they serve, and EDD One Stop locations, where additional publications and information may be obtained. Other sources include:

- Wage And Salary Employment by Industry
- Occupational Outlook Handbook (BLS)
- California Occupational Guides
- California Association for Local Economic Development
- Chambers of Commerce
- Economic Development Organizations
- Newspapers
- Standard Industrial Classification Manual

Automated Access

Electronic access to current data is available through the EDD's Internet address at:

www.calmis.ca.gov

For information about the Web site or to order publications, please call (916) 262-2162.

Description of Projection Tables

Employment includes nonagricultural wage and salary workers, except for self-employed persons, unpaid family workers, private household workers, and those involved in labor-management trade disputes. An **industry division** refers to a distinct group of private, public or nonprofit enterprises engaged in producing goods or providing services. With the exception of government, industries are classified by the Standard Industrial Classification (SIC) system. Industries are then grouped into ten major categories according to the economic activity involved:

Agriculture, Forestry, and Fishing includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

Mining includes all establishments involved in the extraction of minerals, crude petroleum and natural gas, including quarrying, milling and related activities.

Construction includes establishments engaged in contract construction, including new work, additions, and repairs performed by general and special trade contractors.

Manufacturing includes establishments which are usually described as plants, factories or mills engaged in producing or processing nondurable or durable goods. These typically use power-driven machines and material-handling equipment.

Transportation and Public Utilities includes enterprises engaged in passenger and freight transportation by surface, water and air, warehousing and other transportation services. It also includes the communications complex of telephone, telegraph, radio and television; and the utilities providing gas, electric and sanitary services.

Wholesale Trade includes establishments involved in selling merchandise to industrial, commercial, farm, construction contractors and professional businesses; retailers; or other wholesalers.

Retail Trade includes establishments involved in the selling of merchandise for personal or household consumption and rendering services incidental to the sale of goods.

Finance, Insurance, and Real Estate includes banks, savings and loan institutions and security and commodity brokerages, insurance agencies and carriers, real estate

sales and management offices, and rental and planning agencies.

Services includes establishments such as hotels, laundries, auto repair shops, theaters, legal services, advertising services, private schools and hospitals, and nonprofit organizations which are engaged in rendering a variety of services to individuals and businesses.

Government includes legislative, judicial, administrative and regulatory activities of federal, state, local and international governments; and federal, state and local government hospitals and education. Note also, for the federal government sector, employment includes all civilian employees regardless of the activities in which they are engaged.

Industry Tables

Employment By Major Industry (Table 1) This table shows 2001 estimated employment and 2008 projected employment along with the percentage of total employment for each major industry division.

Employment By Industry (Table 2) This table shows estimated employment for 2001 and projected employment by industry for 2008. The SIC code for each group is also listed. The "Employment Change" columns provide the projected change in employment between 2001 and 2008 and the percent change or growth rate over the seven-year period.

Occupations are classified on the basis of work performed and required skills, education, training, or credentials. Based on the Standard Occupational Classification (SOC) system, workers are classified at four levels of aggregation: major group; minor group; broad occupation; and detailed occupation. All occupations are clustered into one of the following 23 major occupation groups:

- *Management*
- *Business and Financial Operations*
- *Computer and Mathematical*
- *Architecture and Engineering*
- *Life, Physical, and Social Science*
- *Community and Social Services*
- *Legal*

- *Education, Training, and Library*
- *Arts, Design, Entertainment, Sports, and Media*
- *Healthcare Practitioners and Technical*
- *Healthcare Support*
- *Protective Service*
- *Food Preparation and Serving and Serving Related*
- *Building and Grounds Cleaning and Maintenance*
- *Personal Care and Service*
- *Sales and Related*
- *Office and Administrative Support*
- *Farming, Fishing, and Forestry*
- *Construction and Extraction*
- *Installation, Maintenance, and Repair*
- *Production*
- *Transportation and Material Moving Operations*
- *Military Specific Operations*

Occupational Tables

Employment by Occupational Group (Table 3) This table shows 2001 and 2008 employment and projected employment for major occupational groups. The "Absolute Change" column gives the number of job opportunities resulting from the creation of new jobs. "Percent Change" shows the percentage change for each occupational group.

Occupations with the Greatest Job Growth (Table 4) This table lists the 50 occupations that are projected to register the largest numerical change between 2001 and 2008. In general, these occupations are numerically large. Some have average projected rates of growth, but because of their employment size will add significant numbers of new jobs over the 2001–2008 period.

Occupations with the Fastest Job Growth (Table 5) This table lists the 50 occupations with the greatest projected percentage increases, providing a different perspective to future occupational employment changes. Please note that some of these are increasing rapidly from relatively small employment levels and not necessarily found in Table 4.

Occupational Employment Projections (Table 6) This table provides occupational detail for up to 800 occupations. Annual average employment in each occupation is shown for 2001 and 2008. The column headed "Number" under

employment change presents the number of job opportunities resulting from the creation of new jobs. The "Percent" column shows the percentage change for each occupation. The next column, "Separations," shows job opportunities that are created by workers leaving the occupation.

Also included in this table is a codes column, showing the California SOC code for each occupational title. The Alphabetical Index of Occupations section may be used to locate occupations in the detailed table.

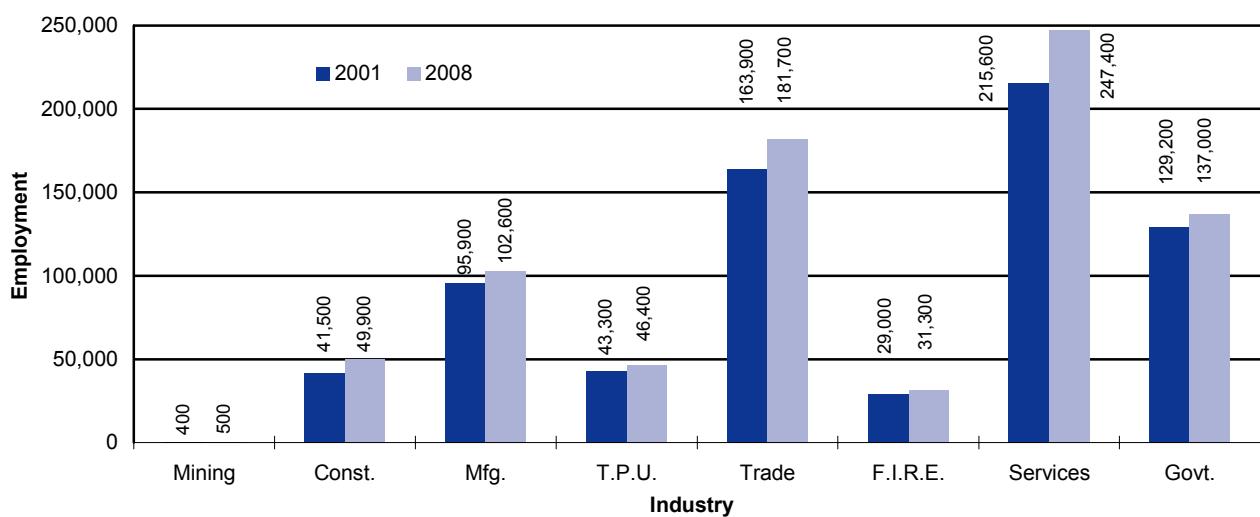
Occupations With The Most Openings (Table 7) This table lists the occupations projected to register the largest absolute growth and separations between 2001 and 2008.

Occupations With Projected Job Loss (Table 8) This table lists the occupations projected to decline over the 2001–2008 period. Declining employment is a sign that the occupation has no growth. However, turnover may result in some job opportunities.

Table 1: Employment by Major Industry¹
2001 – 2008
Alameda County

| Industry | 2001 ² | Percent of Total | 2008 | Percent of Total |
|--|-------------------|------------------|----------------|------------------|
| Total Nonfarm | 718,700 | 100.0% | 796,800 | 100.0% |
| Mining | 400 | 0.1% | 500 | 0.1% |
| Construction | 41,500 | 5.8% | 49,900 | 6.3% |
| Manufacturing | 95,900 | 13.3% | 102,600 | 12.9% |
| Transportation and Public Utilities | 43,300 | 6.0% | 46,400 | 5.8% |
| Trade | 163,900 | 22.8% | 181,700 | 22.8% |
| Finance, Insurance, and Real Estate | 29,000 | 4.0% | 31,300 | 3.9% |
| Services | 215,600 | 30.0% | 247,400 | 31.0% |
| Government | 129,200 | 18.0% | 137,000 | 17.2% |

**Employment by Major Industry
2001–2008**



¹Employment and projections contained in these tables are considered estimates (see introduction for a full explanation of data limitations). Employment is reported by place of work and excludes self-employed persons, unpaid family workers, domestics, volunteers, and those involved in labor-management trade disputes. These data are based on 1987 Standard Industrial Classifications. Annual average industry detail may not add up to totals due to independent rounding. Government data include all civilian government employees regardless of the activities in which they are engaged.

²March 2001 benchmark.

Table 2: Industry Employment Projections¹
2001 – 2008
Alameda County

| Industry | SIC | Annual Average Employment | | Employment Change | |
|--------------------------------------|---|---------------------------|----------------|-------------------|-------------|
| | | 2001 ² | 2008 | Number | Percent |
| TOTAL NONFARM | 074, 075, 078, 10-99 except 88 | 718,700 | 796,800 | 78,100 | 10.9 |
| GOODS PRODUCING | 10-39 | 137,800 | 153,000 | 15,200 | 11.0 |
| MINING | 10-14 | 400 | 500 | 100 | 25.0 |
| CONSTRUCTION | 15-17 | 41,500 | 49,900 | 8,400 | 20.2 |
| General Building Contractors | 15 | 7,000 | 8,300 | 1,300 | 18.6 |
| Heavy Construction | 16 | 3,600 | 4,100 | 500 | 13.9 |
| Special Trade | 17 | 30,900 | 37,500 | 6,600 | 21.4 |
| MANUFACTURING | 20-39 | 95,900 | 102,600 | 6,700 | 7.0 |
| Durable Goods | 24,25,32-39 | 64,400 | 68,800 | 4,400 | 6.8 |
| Lumber, Wood, & Furniture | 24,25 | 2,800 | 3,000 | 200 | 7.1 |
| Stone, Clay, & Glass | 32 | 3,400 | 3,700 | 300 | 8.8 |
| Primary & Fabricated Metal | 33 | 8,200 | 8,500 | 300 | 3.7 |
| Industrial Machinery | 35 | 16,600 | 17,800 | 1,200 | 7.2 |
| Computer & Office Equipment | 357 | 6,800 | 7,300 | 500 | 7.4 |
| Other Industrial Machinery | | 9,700 | 10,500 | 800 | 8.2 |
| Electronic Equipment | 36 | 19,000 | 18,500 | -500 | -2.6 |
| Comm. Equip., Elec. Components | 366,367 | 15,600 | 15,100 | -500 | -3.2 |
| Other Electronic Equipment | | 3,400 | 3,400 | 0 | 0.0 |
| Transportation Equipment | 37 | 7,000 | 7,800 | 800 | 11.4 |
| Instruments & Related Prods. | 38 | 5,500 | 6,900 | 1,400 | 25.5 |
| Misc. Manufacturing | 39 | 2,000 | 2,600 | 600 | 30.0 |
| Nondurable Goods | 20-23,26-31 | 31,500 | 33,800 | 2,300 | 7.3 |
| Food & Kindred Products | 20 | 10,200 | 11,000 | 800 | 7.8 |
| Paper & Allied Products | 26 | 3,100 | 3,400 | 300 | 9.7 |
| Printing & Publishing | 27 | 6,700 | 6,800 | 100 | 1.5 |
| Chemicals & Allied Products | 28 | 5,500 | 6,200 | 700 | 12.7 |
| Petroleum & Coal Products | 29 | 200 | 400 | 200 | 100.0 |
| Other Nondurable Goods | | 5,800 | 6,000 | 200 | 3.4 |
| SERVICE PRODUCING | 074, 075, 078, 40-99 except 88 | 581,000 | 643,800 | 62,800 | 10.8 |
| TRANS. & PUBLIC UTILITIES | 40-42,44-49 | 43,300 | 46,400 | 3,100 | 7.2 |
| Transportation | 40-42,44-47 | 31,300 | 33,500 | 2,200 | 7.0 |
| Trucking & Warehousing | | 42 | 11,800 | 12,200 | 400 |
| Water Transportation | | 44 | 3,300 | 3,800 | 500 |
| Air Transportation | | 45 | 11,200 | 12,300 | 1,100 |
| Other Transportation | | | 5,000 | 5,200 | 200 |
| Communications & Public Utilities | 48,49 | 12,000 | 12,900 | 900 | 7.5 |
| Communications | 48 | 8,700 | 9,300 | 600 | 6.9 |
| Electric, Gas & Sanitary Services | 49 | 3,300 | 3,600 | 300 | 9.1 |

Table 2: Industry Employment Projections¹
2001 – 2008
Alameda County

| Industry | SIC | Annual Average Employment | | Employment Change | |
|---|---|---------------------------|----------------|-------------------|-------------|
| | | 2001 ² | 2008 | Number | Percent |
| TRADE | 50-59 | 163,900 | 181,700 | 17,800 | 10.9 |
| Wholesale Trade | 50,51 | 55,700 | 60,900 | 5,200 | 9.3 |
| Wholesale –Durable | 50 | 34,900 | 38,000 | 3,100 | 8.9 |
| Wholesale –Nondurable | 51 | 20,800 | 22,900 | 2,100 | 10.1 |
| Retail Trade | 52-59 | 108,200 | 120,800 | 12,600 | 11.6 |
| General Merchandise | 53 | 11,000 | 11,900 | 900 | 8.2 |
| Food Stores | 54 | 15,300 | 16,600 | 1,300 | 8.5 |
| Automotive Dealers & Service | 55 | 10,400 | 11,500 | 1,100 | 10.6 |
| Eating & Drinking Places | 58 | 35,800 | 41,200 | 5,400 | 15.1 |
| Other Retail Trade | | 35,700 | 39,600 | 3,900 | 10.9 |
| FINANCE, INSURANCE & REAL ESTATE | 60-65,67 | 29,000 | 31,300 | 2,300 | 7.9 |
| Finance | 60-62,67 | 14,400 | 15,500 | 1,100 | 7.6 |
| Other Finance, Insurance & Real Estate | | 14,700 | 15,800 | 1,100 | 7.5 |
| SERVICES | 074, 075, 078, 70-89 except 88 | 215,600 | 247,400 | 31,800 | 14.7 |
| Hotels & Other Lodging Places | 70 | 5,600 | 6,200 | 600 | 10.7 |
| Personal Services | 72 | 6,100 | 6,700 | 600 | 9.8 |
| Business Services | 73 | 64,200 | 75,600 | 11,400 | 17.8 |
| Health Services | 80 | 48,700 | 56,100 | 7,400 | 15.2 |
| Private Educational Services | 82 | 9,700 | 10,900 | 1,200 | 12.4 |
| Engineering & Management | 87 | 26,200 | 30,800 | 4,600 | 17.6 |
| Other Services | | 55,000 | 61,100 | 6,100 | 11.1 |
| GOVERNMENT | | 129,200 | 137,000 | 7,800 | 6.0 |
| Federal Government | | 12,700 | 13,400 | 700 | 5.5 |
| State & Local Government | | 116,500 | 123,600 | 7,100 | 6.1 |
| State Government | | 46,400 | 48,900 | 2,500 | 5.4 |
| State Education | | 26,000 | 28,100 | 2,100 | 8.1 |
| Other State Government | | 20,300 | 20,800 | 500 | 2.5 |
| Local Government | | 70,100 | 74,700 | 4,600 | 6.6 |
| Local Education | | 32,200 | 34,100 | 1,900 | 5.9 |
| Local Noneducation | | 38,000 | 40,600 | 2,600 | 6.8 |

¹Employment and projections contained in these tables are considered estimates (see introduction for a full explanation of data limitations). Employment is reported by place of work and excludes self-employed persons, unpaid family workers, domestics, volunteers, and those involved in labor-management trade disputes. These data are based on 1987 Standard Industrial Classifications. Annual average industry detail may not add up to totals due to independent rounding. Government data include all civilian government employees regardless of the activities in which they are engaged.

²March 2001 benchmark.

Occupational Trends and Outlook

Job growth or decline is influenced by the overall level of economic activity in a given area; that is, when economic activity refers to the overall economic growth or decline of industries and/or changes in occupation distributions within individual industries. Each area's economic climate influences the growth or decline of occupations that account for a large number of jobs within that area. In contrast, occupations with a small number of workers grow or decline as a result of the growth or decline of their specific industries.

This section provides a discussion of major trends for occupation categories shown in **Table 6: Occupational Employment Projections** (beginning on page D-18). Projected changes in the level of employment in each occupation are an estimate of new job openings expected over a seven-year period. Separations, an estimate of the number of people leaving the workforce or an occupation, accounts for additional job openings. These estimates do not include job openings that are a result of people who change jobs but stay in the same occupation.

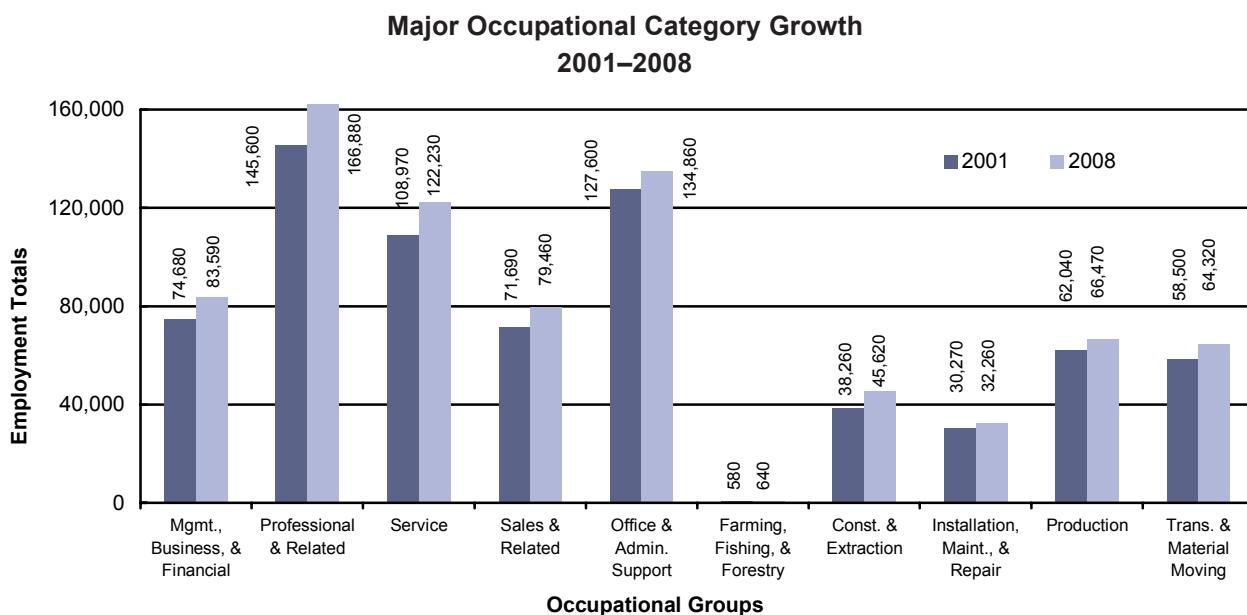
Alameda County

In 2001, Alameda County had a total of 718,700 workers employed in all industries. Employment projections call for that number to reach 796,800 by 2008. This represents an annual growth rate of 1.6 percent, below the 2.2 percent growth rate predicted for California as a whole. Separations will add another 125,670 job openings.

Professional and related occupations was Alameda County's largest occupational group in 2001. The professional and related occupations group employed 145,600 persons in 2001 and is projected to add the most new jobs (21,280) by 2008, a 14.6 percent growth rate. *Office and administrative support occupations* was the second-largest group, with employment of 127,600 in 2001. This group is expected to add 7,260 new jobs to reach 134,860 by 2008, a 5.7 percent growth rate. The third-largest group is *service occupations* with 2001 employment of 108,970 and expected growth rate of 12.2 percent (13,260 jobs).

Construction and extraction occupations is projected to be the fastest growing occupational group, with an estimated growth rate of 19.2 percent, followed by *professional and related occupations* with a 14.6 percent growth rate.

In Alameda County, the occupation with the greatest growth (see **Table 4: Occupations with the Greatest Job Growth**) is *retail salespersons*, projected to grow by 2,410 jobs during the seven-year projection period. These jobs are found mostly in the industry categories of department stores; miscellaneous shopping goods stores; and family clothing stores (see **Table 2: Industry Employment Projections**). *Combined food preparation and service workers (including fast food)* has projected growth of 2,360 jobs in eating and drinking places; grocery stores;



Occupational Trends and Outlook

commercial sports; and hotels and motels. Thirdly is *cashiers*, up 1,990 jobs, found in grocery stores; drug and proprietary stores; and gasoline service stations. *Customer service representatives* will gain 1,810 jobs, largely employed in computer and data processing services; professional and commercial equipment; telephone communications; and commercial banks. *Registered nurses* will add 1,750 jobs primarily in hospitals; offices of physicians; and nursing and personal care facilities.

The fastest growing occupation during the projection period in Alameda County will be *computer support specialists*, with a growth rate of 35.1 percent (see **Table 5: Occupations with the Fastest Job Growth**) primarily in computer and data processing services; colleges and universities; and the professional and commercial equipment industry. The second-fastest growing occupation is *computer software engineers (systems software)*, gaining 34.4 percent, and largely employed in computer and data processing services; research and testing services; communications equipment; and the computer and office equipment industry. *Computer software engineers (applications)* is projected to increase 33.6 percent in employment by 2008. This occupation is primarily found in computer and data processing services; telephone communications; engineering and architectural services; and research and testing services. Next is *social and human service assistants*, which will increase 33.3 percent and can be found in individual and family services; and

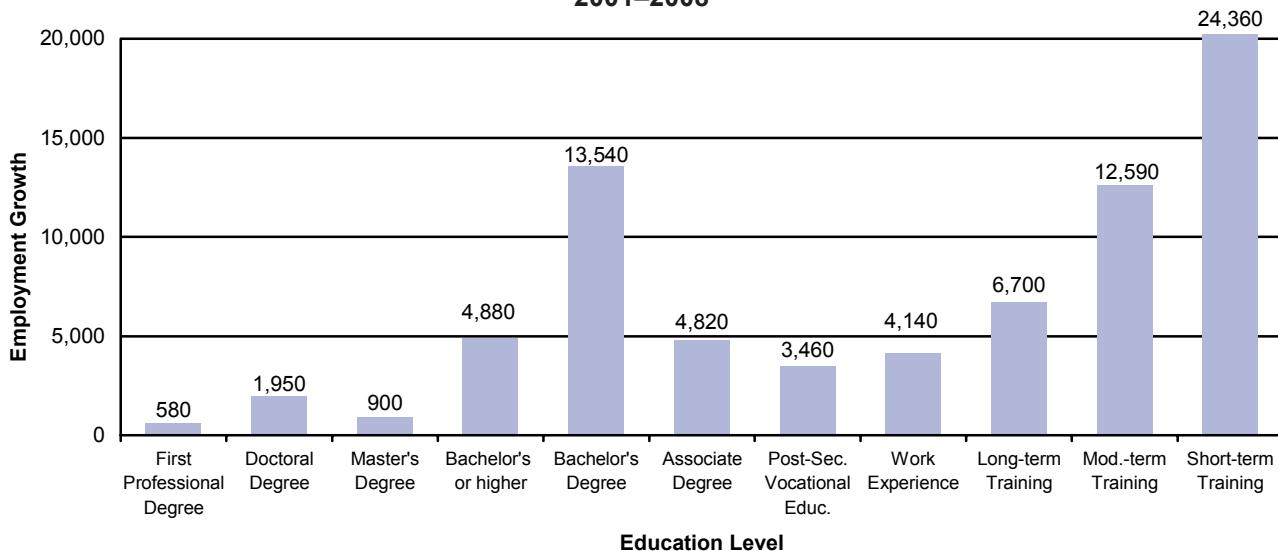
local government (except hospitals and education). *Network and computer systems administrators* are projected to gain 31.5 percent by 2008, employed predominately in computer and data processing services; local government (except hospitals and education); and elementary and secondary schools.

Training

The greatest number of new jobs in Alameda County, 24,360 jobs or 31.2 percent, will require **short-term on-the-job training**. The next largest number of new jobs, 17.3 percent or 13,540 jobs, will require the employee to hold a **bachelor's degree**. Some 16.1 percent (12,590 jobs) will be entry-level, requiring **moderate-term on-the-job training**. There will be 6,700 jobs (8.6 percent) requiring **long-term on-the-job training**.

The chart below displays the number of new jobs by education and experience levels. For more detailed descriptions of training levels, refer to the definitions on the following page.

**Employment Growth by Education and Experience Levels
2001–2008**



Training Level Definitions

Occupational training and education classifications were developed by the Bureau of Labor Statistics to improve on prior classification systems that did not distinguish between occupations with comparable educational requirements. For example, neither carpenters nor laborers require formal education beyond high school, but the complexity of the work and the training time required results in carpenters being placed in the long-term on-the-job training category and laborers placed in the short-term on-the-job training category. Of course there is more than one way to qualify for a job. In this classification system, the education and training required reflects the manner in which most workers become proficient in that occupation and the preferences of most employers.

First professional degree (1)

Occupations that require at least two years of full-time academic study beyond a bachelor's degree (for example, law, medicine, dentistry and clergy).

Doctoral degree (2)

Occupations that require at least three years of full-time academic study beyond a bachelor's degree, culminating in a doctoral degree.

Master's degree (3)

Occupations that require the completion of a master's degree program, which is usually one to two years beyond a bachelor's degree.

Bachelor's or higher, some work experience (4)

Occupations that generally require work experience in an occupation requiring a bachelor's or higher degree. Most occupations in this category are managerial occupations that require work experience in a related non-managerial occupation.

Bachelor's degree (5)

Occupations that require the completion of at least 4, but not more than 5 years, of full-time academic study beyond high school resulting in a Bachelor's degree.

Associate degree (6)

Occupations that require the completion of at least 2 years of full-time academic study beyond high school.

Post-secondary vocational education (7)

Occupations that require completion of vocational school training.

Work experience (8)

Occupations that require skills obtained through work experience in a related occupation.

Long-term on-the-job training (9)

Occupations that require more than 12 months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the skills needed for average job performance.

Moderate-term on-the-job training (10)

Occupations in which workers can develop average job performance after 1 to 12 months of combined on-the-job experience and informal training.

Short-term on-the-job training (11)

Occupations in which workers can develop skills needed after a short demonstration or up to one month of on-the-job experience and instruction.

**Table 3: Employment by Occupation Group
2001 – 2008
Alameda County**

| Occupational Group | 2001 (1) | Percent of Total | 2008 | Percent of Total | Absolute Change | Percent Change |
|---------------------------------------|----------|------------------|---------|------------------|-----------------|----------------|
| Total, All Occupations | 718,700 | 100.0% | 796,800 | 100.0% | 78,100 | 10.9% |
| Management, Business, and Financial | 74,680 | 10.4% | 83,590 | 10.5% | 8,910 | 11.9% |
| Professional and Related | 145,600 | 20.3% | 166,880 | 20.9% | 21,280 | 14.6% |
| Service | 108,970 | 15.2% | 122,230 | 15.3% | 13,260 | 12.2% |
| Sales and Related | 71,690 | 10.0% | 79,460 | 10.0% | 7,770 | 10.8% |
| Office and Administrative Support | 127,600 | 17.8% | 134,860 | 16.9% | 7,260 | 5.7% |
| Farming, Fishing, and Forestry | 580 | 0.1% | 640 | 0.1% | 60 | 10.3% |
| Construction and Extraction | 38,260 | 5.3% | 45,620 | 5.7% | 7,360 | 19.2% |
| Installation, Maintenance, and Repair | 30,270 | 4.2% | 32,260 | 4.0% | 1,990 | 6.6% |
| Production | 62,040 | 8.6% | 66,470 | 8.3% | 4,430 | 7.1% |
| Transportation and Material Moving | 58,500 | 8.1% | 64,320 | 8.1% | 5,820 | 9.9% |

¹Total is based on the March 2001 Benchmark.

Table 4: Occupations with the Greatest Job Growth¹
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change Percent | BLS Training Level | Education/Experience | |
|----------|--|---------------------------|--------|------------------------------|--------------------|----------------------|---------------------------------------|
| | | 2001 ² | 2008 | | | Number | Percent |
| 41-2031 | Retail Salespersons | 19,680 | 22,090 | 2.410 | 12.2 | 11 | Short-Term On-The-Job Training |
| 35-3021 | Comb Food Prep & Serving Wrkrs, Incl Fast Food | 11,290 | 13,650 | 2,360 | 20.9 | 11 | Short-Term On-The-Job Training |
| 41-2011 | Cashiers | 16,110 | 18,100 | 1,990 | 12.4 | 11 | Short-Term On-The-Job Training |
| 43-4051 | Customer Service Representatives | 9,690 | 11,500 | 1,810 | 18.7 | 10 | Moderate-Term On-The-Job Training |
| 29-1111 | Registered Nurses | 9,490 | 11,240 | 1,750 | 18.4 | 6 | Associate Degree |
| 15-1031 | Computer Software Engineers, Applications | 4,340 | 5,800 | 1,460 | 33.6 | 5 | Bachelor's Degree |
| 43-9061 | Office Clerks, General | 18,620 | 19,990 | 1,370 | 7.4 | 11 | Short-Term On-The-Job Training |
| 11-1021 | General & Operations Managers | 12,980 | 14,270 | 1,290 | 9.9 | 4 | Bachelor's or Higher & Some Work Exp. |
| 47-2061 | Construction Laborers | 5,380 | 6,580 | 1,200 | 22.3 | 10 | Moderate-Term On-The-Job Training |
| 53-7062 | Laborers & Freight, Stock, & Material Movers, Hand | 13,210 | 14,390 | 1,180 | 8.9 | 11 | Short-Term On-The-Job Training |
| 31-1012 | Nursing Aides, Orderlies, & Attendants | 5,500 | 6,660 | 1,160 | 21.1 | 11 | Short-Term On-The-Job Training |
| 47-2031 | Carpenters | 6,380 | 7,520 | 1,140 | 17.9 | 9 | Long-Term On-The-Job Training |
| 15-1041 | Computer Support Specialists | 3,160 | 4,270 | 1,110 | 35.1 | 6 | Associate Degree |
| 53-3032 | Truck Drivers, Heavy & Tractor-Trailer | 7,520 | 8,590 | 1,070 | 14.2 | 10 | Moderate-Term On-The-Job Training |
| 53-3033 | Truck Drivers, Light or Delivery Services | 7,330 | 8,400 | 1,070 | 14.6 | 11 | Short-Term On-The-Job Training |
| 15-1032 | Computer Software Engineers, Systems Software | 2,820 | 3,790 | 970 | 34.4 | 5 | Bachelor's Degree |
| 35-3031 | Waiters & Waitresses | 6,720 | 7,680 | 960 | 14.3 | 11 | Short-Term On-The-Job Training |
| 15-1051 | Computer Systems Analysts | 3,570 | 4,520 | 950 | 26.6 | 5 | Bachelor's Degree |
| 47-2111 | Electricians | 3,820 | 4,760 | 940 | 24.6 | 9 | Long-Term On-The-Job Training |
| 41-1011 | First-Line Sups/Mgrs of Retail Sales Workers | 5,950 | 6,720 | 770 | 12.9 | 8 | Work Experience |
| 53-7064 | Packers & Packagers, Hand | 5,940 | 6,690 | 750 | 12.6 | 11 | Short-Term On-The-Job Training |
| 41-4012 | Sales Reps, Whlsale & Mfg, Ex Tech & Scientific Products | 10,660 | 11,400 | 740 | 6.9 | 10 | Moderate-Term On-The-Job Training |
| 11-2022 | Sales Managers | 2,610 | 3,330 | 720 | 27.6 | 4 | Bachelor's or Higher & Some Work Exp. |
| 25-9041 | Teacher Assistants | 5,350 | 6,060 | 710 | 13.3 | 11 | Short-Term On-The-Job Training |
| 43-5081 | Stock Clerks & Order Fillers | 7,740 | 8,450 | 710 | 9.2 | 11 | Short-Term On-The-Job Training |
| 13-2011 | Accountants & Auditors | 5,140 | 5,780 | 640 | 12.5 | 5 | Bachelor's Degree |
| 43-4171 | Receptionists & Information Clerks | 5,880 | 6,520 | 640 | 10.9 | 11 | Short-Term On-The-Job Training |
| 31-9092 | Medical Assistants | 2,150 | 2,760 | 610 | 28.4 | 10 | Moderate-Term On-The-Job Training |
| 37-2011 | Janitors & Clean, Ex Maids & Housekeep Cleaners | 8,610 | 9,210 | 600 | 7.0 | 11 | Short-Term On-The-Job Training |
| 49-3023 | Automotive Service Technicians & Mechanics | 6,150 | 6,740 | 590 | 9.6 | 7 | Post-Secondary Vocational Education |

Table 4: Occupations with the Greatest Job Growth¹
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change Percent | BLS Training Level | Education/Experience |
|-----------------------------------|--|------------------------------|----------------|---------------------------------|--------------------------|---|
| | | 2001 ² | 2008 | | | |
| 15-1071 | Network & Computer Systems Administrators | 1,840 | 2,420 | 580 | 31.5 | 5 Bachelor's Degree |
| 33-9032 | Security Guards | 7,540 | 8,110 | 570 | 7.6 | 11 Short-Term On-The-Job Training |
| 51-2092 | Team Assemblers | 7,860 | 8,390 | 530 | 6.7 | 10 Moderate-Term On-The-Job Training |
| 25-1191 | Graduate Teaching Assistants | 3,380 | 3,890 | 510 | 15.1 | 5 Bachelor's Degree |
| 11-3021 | Computer & Information Systems Managers | 2,030 | 2,530 | 500 | 24.6 | 4 Bachelor's or Higher & Some Work Exp. |
| 13-1111 | Management Analysts | 2,210 | 2,710 | 500 | 22.6 | 4 Bachelor's or Higher & Some Work Exp. |
| 37-3011 | Landscaping & Groundskeeping Workers | 4,920 | 5,410 | 490 | 10.0 | 11 Short-Term On-The-Job Training |
| 33-3051 | Police & Sheriff's Patrol Officers | 3,850 | 4,330 | 480 | 12.5 | 9 Long-Term On-The-Job Training |
| 35-2014 | Cooks, Restaurant | 2,790 | 3,270 | 480 | 17.2 | 9 Long-Term On-The-Job Training |
| 43-6011 | Executive Secretaries & Administrative Assistants | 8,950 | 9,430 | 480 | 5.4 | 10 Moderate-Term On-The-Job Training |
| 51-9111 | Packaging & Filling Machine Operators & Tenders | 3,060 | 3,530 | 470 | 15.4 | 11 Short-Term On-The-Job Training |
| 11-3031 | Financial Managers | 3,380 | 3,840 | 460 | 13.6 | 4 Bachelor's or Higher & Some Work Exp. |
| 37-2012 | Maids & Housekeeping Cleaners | 3,370 | 3,820 | 450 | 13.4 | 11 Short-Term On-The-Job Training |
| 43-1011 | First-Line Sups/Mgrs of Office & Admin Support Workers | 8,190 | 8,640 | 450 | 5.5 | 8 Work Experience |
| 25-2021 | Elementary School Teachers, Except Special Ed | 6,750 | 7,190 | 440 | 6.5 | 5 Bachelor's Degree |
| 35-2021 | Food Preparation Workers | 5,620 | 6,050 | 430 | 7.7 | 11 Short-Term On-The-Job Training |
| 47-2141 | Painters, Construction & Maintenance | 2,390 | 2,810 | 420 | 17.6 | 10 Moderate-Term On-The-Job Training |
| 39-9021 | Personal & Home Care Aides | 1,700 | 2,110 | 410 | 24.1 | 11 Short-Term On-The-Job Training |
| 51-4121 | Welders, Cutters, Solderers, & Brazers | 2,360 | 2,760 | 400 | 16.9 | 7 Post-Secondary Vocational Education |
| 43-5071 | Shipping, Receiving, & Traffic Clerks | 5,940 | 6,330 | 390 | 6.6 | 11 Short-Term On-The-Job Training |
| TOTAL OF THESE OCCUPATIONS | | 321,920 | 365,030 | 43,110 | 13.4 | |

¹Excludes All Other categories.

²March 2001 Benchmark.

Table 5: Occupations with the Fastest Job Growth¹
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | BLS Training Level | Education/Experienc |
|-------------|---|------------------------------|-------|----------------------|---------|--------------------------|---|
| | | 2001 ² | 2008 | Number | Percent | | |
| 15-1041 | Computer Support Specialists | 3,160 | 4,270 | 1,110 | 35.1 | 6 | Associate Degree |
| 15-1032 | Computer Software Engineers, Systems Software | 2,820 | 3,790 | 970 | 34.4 | 5 | Bachelor's Degree |
| 15-1031 | Computer Software Engineers, Applications | 4,340 | 5,800 | 1,460 | 33.6 | 5 | Bachelor's Degree |
| 21-1093 | Social & Human Service Assistants | 750 | 1,000 | 250 | 33.3 | 10 | Moderate-Term On-The-Job Training |
| 15-1071 | Network & Computer Systems Administrators | 1,840 | 2,420 | 580 | 31.5 | 5 | Bachelor's Degree |
| 31-9092 | Medical Assistants | 2,150 | 2,760 | 610 | 28.4 | 10 | Moderate-Term On-The-Job Training |
| 15-1081 | Network Systems & Data Communications Analysts | 740 | 950 | 210 | 28.4 | 5 | Bachelor's Degree |
| 11-2022 | Sales Managers | 2,610 | 3,330 | 720 | 27.6 | 4 | Bachelor's Or Higher & Some Work Experience |
| 15-1061 | Database Administrators | 800 | 1,020 | 220 | 27.5 | 5 | Bachelor's Degree |
| 15-1051 | Computer Systems Analysts | 3,570 | 4,520 | 950 | 26.6 | 5 | Bachelor's Degree |
| 19-1021 | Biochemists & Biophysicists | 830 | 1,040 | 210 | 25.3 | 2 | Doctoral Degree |
| 47-2111 | Electricians | 3,820 | 4,760 | 940 | 24.6 | 9 | Long-Term On-The-Job Training |
| 11-3021 | Computer & Information Systems Managers | 2,030 | 2,530 | 500 | 24.6 | 4 | Bachelor's Or Higher & Some Work Experience |
| 19-2031 | Chemists | 610 | 760 | 150 | 24.6 | 5 | Bachelor's Degree |
| 39-9021 | Personal & Home Care Aides | 1,700 | 2,110 | 410 | 24.1 | 11 | Short-Term On-The-Job Training |
| 47-2211 | Sheet Metal Workers | 960 | 1,190 | 230 | 24.0 | 10 | Moderate-Term On-The-Job Training |
| 47-2081 | Drywall & Ceiling Tile Installers | 920 | 1,140 | 220 | 23.9 | 10 | Moderate-Term On-The-Job Training |
| 43-4081 | Hotel, Motel, & Resort Desk Clerks | 640 | 790 | 150 | 23.4 | 11 | Short-Term On-The-Job Training |
| 47-2161 | Plasterers & Stucco Masons | 730 | 900 | 170 | 23.3 | 9 | Long-Term On-The-Job Training |
| 47-2171 | Reinforcing Iron & Rebar Workers | 600 | 740 | 140 | 23.3 | 9 | Long-Term On-The-Job Training |
| 29-2071 | Medical Records & Health Information Technicians | 560 | 690 | 130 | 23.2 | 6 | Associate Degree |
| 27-3031 | Public Relations Specialists | 780 | 960 | 180 | 23.1 | 5 | Bachelor's Degree |
| 49-9021 | Heating, Air Conditioning, & Refrigeration Mechanics | 1,140 | 1,400 | 260 | 22.8 | 9 | Long-Term On-The-Job Training |
| 25-2041 | Special Ed Teachers, Preschool, Kindergarten, & Elem Scho | 660 | 810 | 150 | 22.7 | 5 | Bachelor's Degree |
| 13-1111 | Management Analysts | 2,210 | 2,710 | 500 | 22.6 | 4 | Bachelor's Or Higher & Some Work Experience |
| 47-2061 | Construction Laborers | 5,380 | 6,580 | 1,200 | 22.3 | 10 | Moderate-Term On-The-Job Training |
| 47-2181 | Roofers | 1,440 | 1,760 | 320 | 22.2 | 10 | Moderate-Term On-The-Job Training |
| 19-4031 | Chemical Technicians | 450 | 550 | 100 | 22.2 | 6 | Associate Degree |
| 29-1126 | Respiratory Therapists | 510 | 620 | 110 | 21.6 | 6 | Associate Degree |
| 29-2052 | Pharmacy Technicians | 890 | 1,080 | 190 | 21.3 | 10 | Moderate-Term On-The-Job Training |

Table 5: Occupations with the Fastest Job Growth¹
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | BLS Training Level | Education/Experience |
|-----------------------------------|--|------------------------------|----------------|----------------------|-------------|--------------------------|---|
| | | 2001 ² | 2008 | Number | Percent | | |
| 53-7011 | Conveyor Operators & Tenders | 800 | 970 | 170 | 21.3 | 11 | Short-Term On-The-Job Training |
| 47-2121 | Glassblowers | 850 | 1,030 | 180 | 21.2 | 9 | Long-Term On-The-Job Training |
| 31-1012 | Nursing Aides, Orderlies, & Attendants | 5,500 | 6,660 | 1,160 | 21.1 | 11 | Short-Term On-The-Job Training |
| 35-3021 | Cook Food Prep & Serving Workers, Incl Fast Food | 11,290 | 13,650 | 2,360 | 20.9 | 11 | Short-Term On-The-Job Training |
| 31-1011 | Home Health Aides | 1,290 | 1,560 | 270 | 20.9 | 11 | Short-Term On-The-Job Training |
| 39-3031 | Ushers, Lobby Attendants, & Ticket Takers | 480 | 580 | 100 | 20.8 | 11 | Short-Term On-The-Job Training |
| 47-2221 | Structural Iron & Steel Workers | 980 | 1,180 | 200 | 20.4 | 9 | Long-Term On-The-Job Training |
| 21-1022 | Medical & Public Health Social Workers | 500 | 600 | 100 | 20.0 | 5 | Bachelor's Degree |
| 19-1042 | Medical Scientists, Except Epidemiologists | 560 | 670 | 110 | 19.6 | 2 | Doctoral Degree |
| 51-9041 | Extrude, Form, Press, & Compact Mach Set, Ops, Tenders | 410 | 490 | 80 | 19.5 | 10 | Moderate-Term On-The-Job Training |
| 11-9111 | Medical & Health Services Managers | 890 | 1,060 | 170 | 19.1 | 4 | Bachelor's Or Higher & Some Work Experience |
| 51-9122 | Painters, Transportation Equipment | 630 | 750 | 120 | 19.0 | 10 | Moderate-Term On-The-Job Training |
| 47-3013 | Helpers-Electricians | 420 | 500 | 80 | 19.0 | 11 | Short-Term On-The-Job Training |
| 43-4141 | New Accounts Clerks | 690 | 820 | 130 | 18.8 | 8 | Work Experience |
| 43-4051 | Customer Service Representatives | 9,690 | 11,500 | 1,810 | 18.7 | 10 | Moderate-Term On-The-Job Training |
| 11-9021 | Construction Managers | 1,020 | 1,210 | 190 | 18.6 | 5 | Bachelor's Degree |
| 29-1111 | Registered Nurses | 9,490 | 11,240 | 1,750 | 18.4 | 6 | Associate Degree |
| 31-9091 | Dental Assistants | 1,320 | 1,560 | 240 | 18.2 | 10 | Moderate-Term On-The-Job Training |
| 47-2041 | Carpet Installers | 880 | 1,040 | 160 | 18.2 | 10 | Moderate-Term On-The-Job Training |
| 47-2031 | Carpenters | 6,380 | 7,520 | 1,140 | 17.9 | 9 | Long-Term On-The-Job Training |
| TOTAL OF THESE OCCUPATIONS | | 103,710 | 127,570 | 23,860 | 23.0 | | |

¹Excludes All Other categories and occupations of less than 400 in the year 2001.

²March 2001 Benchmark.

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|---------|----------------------|---------|-----------------------------------|--------------------------|---------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 00-0000 | Total, All Occupations | 718,700 | 796,800 | 78,100 | 10.9 | 125,670 | | |
| 11-13-0000 | Management, Business, & Financial Occupations | 74,680 | 83,590 | 8,910 | 11.9 | 10,110 | | |
| 11-0000 | Management Occupations | 44,000 | 49,150 | 5,150 | 11.7 | 5,610 | | |
| 11-1011 | Chief Executives | 3,020 | 3,290 | 270 | 8.9 | 690 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-1021 | General & Operations Managers | 12,980 | 14,270 | 1,290 | 9.9 | 1,570 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-1031 | Legislators | 170 | 190 | 20 | 11.8 | 40 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-2011 | Advertising & Promotions Managers | 640 | 750 | 110 | 17.2 | 70 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-2021 | Marketing Managers | 1,510 | 1,760 | 250 | 16.6 | 160 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-2022 | Sales Managers | 2,610 | 3,330 | 720 | 27.6 | 290 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-2031 | Public Relations Managers | 280 | 320 | 40 | 14.3 | 30 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-3011 | Administrative Services Managers | 1,580 | 1,760 | 180 | 11.4 | 190 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-3021 | Computer & Information Systems Managers | 2,030 | 2,530 | 500 | 24.6 | 260 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-3031 | Financial Managers | 3,380 | 3,840 | 460 | 13.6 | 380 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-3040 | Human Resources Managers | 1,100 | 1,160 | 60 | 5.5 | * | | |
| 11-3051 | Industrial Production Managers | 1,140 | 1,200 | 60 | 5.3 | 130 | 5 | Bachelor's Degree |
| 11-3061 | Purchasing Managers | 740 | 740 | 0 | 0.0 | 160 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-3071 | Transportation, Storage, & Distribution Managers | 710 | 780 | 70 | 9.9 | 80 | 8 | Work Experience |
| 11-9021 | Construction Managers | 1,020 | 1,210 | 190 | 18.6 | 120 | 5 | Bachelor's Degree |
| 11-9031 | Educ. Admins., Preschool & Child Care Center | 350 | 400 | 50 | 14.3 | 70 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-9032 | Educ. Admins., Elementary & Secondary School | 850 | 910 | 60 | 7.1 | 160 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-9033 | Education Administrators, Postsecondary | 470 | 500 | 30 | 6.4 | 90 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-9041 | Engineering Managers | 2,500 | 2,580 | 80 | 3.2 | 280 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-9051 | Food Service Managers | 810 | 920 | 110 | 13.6 | 70 | 8 | Work Experience |
| 11-9111 | Medical & Health Services Managers | 890 | 1,060 | 170 | 19.1 | 120 | 4 | Bachelor's or Higher & Some Work Exp. |
| 11-9121 | Natural Sciences Managers | 360 | 400 | 40 | 11.1 | 50 | 4 | Bachelor's Degree |
| 11-9141 | Property, Real Estate, & Community Assn Mgrs | 1,010 | 1,130 | 120 | 11.9 | 120 | 5 | Bachelor's Degree |
| 11-9151 | Social & Community Service Managers | 510 | 580 | 70 | 13.7 | 70 | 5 | Bachelor's Degree |
| 11-9199 | Managers, All Other | 3,340 | 3,540 | 200 | 6.0 | 410 | 8 | Work Experience |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------------|--|------------------------------|----------------|----------------------|-------------|-----------------------------------|--------------------------|---------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 13-0000 | Business & Financial Operations Occupations | 30,680 | 34,440 | 3,760 | 12.3 | 4,500 | | |
| 13-1022 | Wholesale & Retail Buyers, Except Farm Products | 1,130 | 1,120 | -10 | -0.9 | 240 | 5 | Bachelor's Degree |
| 13-1023 | Purch Agents, Ex Wholesale, Retail, & Farm Products | 1,640 | 1,820 | 180 | 11.0 | 240 | 5 | Bachelor's Degree |
| 13-1031 | Claims Adjusters, Examiners, & Investigators | 1,130 | 1,290 | 160 | 14.2 | 90 | 9 | Long-Term On-The-Job Training |
| 13-1041 | Comp Officers, Ex Ag, Const, Hlth & Safety, & Trans | 1,710 | 1,840 | 130 | 7.6 | 310 | 9 | Long-Term On-The-Job Training |
| 13-1051 | Cost Estimators | 1,150 | 1,340 | 190 | 16.5 | 190 | 5 | Bachelor's Degree |
| 13-1071 | Employment, Recruitment, & Placement Specialists | 900 | 960 | 60 | 6.7 | 120 | 5 | Bachelor's Degree |
| 13-1072 | Compensation, Benefits, & Job Analysis Specialists | 600 | 650 | 50 | 8.3 | 80 | 5 | Bachelor's Degree |
| 13-1073 | Training & Development Specialists | 1,100 | 1,260 | 160 | 14.5 | 160 | 5 | Bachelor's Degree |
| 13-1111 | Management Analysts | 2,210 | 2,710 | 500 | 22.6 | 150 | 4 | Bachelor's or Higher & Some Work Exp. |
| 13-1121 | Meeting & Convention Planners | 110 | 120 | 10 | 9.1 | 20 | 5 | Bachelor's Degree |
| 13-1199 | Business Operations Specialists, All Other | 8,580 | 9,620 | 1,040 | 12.1 | 1,590 | 5 | Bachelor's Degree |
| 13-2011 | Accountants & Auditors | 5,140 | 5,780 | 640 | 12.5 | 560 | 5 | Bachelor's Degree |
| 13-2021 | Appraisers & Assessors of Real Estate | 140 | 160 | 20 | 14.3 | 30 | 7 | Post Secondary Vocational Education |
| 13-2031 | Budget Analysts | 320 | 350 | 30 | 9.4 | 50 | 5 | Bachelor's Degree |
| 13-2041 | Credit Analysts | 380 | 430 | 50 | 13.2 | 60 | 5 | Bachelor's Degree |
| 13-2051 | Financial Analysts | 1,030 | 1,180 | 150 | 14.6 | 100 | 5 | Bachelor's Degree |
| 13-2052 | Personal Financial Advisors | 270 | 280 | 10 | 3.7 | 20 | 5 | Bachelor's Degree |
| 13-2053 | Insurance Underwriters | 180 | 190 | 10 | 5.6 | 20 | 5 | Bachelor's Degree |
| 13-2072 | Loan Officers | 790 | 880 | 90 | 11.4 | 120 | 5 | Bachelor's Degree |
| 13-2081 | Tax Examiners, Collectors, & Revenue Agents | 590 | 630 | 40 | 6.8 | 110 | 5 | Moderate-Term On-The-Job Training |
| 13-2082 | Tax Preparers | 550 | 580 | 30 | 5.5 | 80 | 10 | Moderate-Term On-The-Job Training |
| 13-2099 | Financial Specialists, All Other | 1,030 | 1,250 | 220 | 21.4 | 160 | 5 | Bachelor's Degree |
| 15-29-0000 | Professional & Related Occupations | 145,600 | 166,880 | 21,280 | 14.6 | 20,760 | | |
| 15-0000 | Computer & Mathematical Science Occupations | 23,710 | 29,680 | 5,970 | 25.2 | 1,700 | | |
| 15-1011 | Computer & Information Scientists, Research | 640 | 750 | 110 | 17.2 | 40 | 2 | Doctoral Degree |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|---------------|----------------------|------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 15-1021 | Computer Programmers | 3,900 | 3,910 | 10 | 0.3 | 570 | 5 | Bachelor's Degree |
| 15-1031 | Computer Software Engineers, Applications | 4,340 | 5,800 | 1,460 | 33.6 | 230 | 5 | Bachelor's Degree |
| 15-1032 | Computer Software Engineers, Systems Software | 2,820 | 3,790 | 970 | 34.4 | 150 | 5 | Bachelor's Degree |
| 15-1041 | Computer Support Specialists | 3,160 | 4,270 | 1,110 | 35.1 | 110 | 6 | Associate Degree |
| 15-1051 | Computer Systems Analysts | 3,570 | 4,520 | 950 | 26.6 | 240 | 5 | Bachelor's Degree |
| 15-1061 | Database Administrators | 800 | 1,020 | 220 | 27.5 | 30 | 5 | Bachelor's Degree |
| 15-1071 | Network & Computer Systems Administrators | 1,840 | 2,420 | 580 | 31.5 | 60 | 5 | Bachelor's Degree |
| 15-1081 | Network Systems & Data Communications Analysts | 740 | 950 | 210 | 28.4 | 20 | 5 | Bachelor's Degree |
| 15-1099 | Computer Specialists, All Other | 1,110 | 1,450 | 340 | 30.6 | 80 | 7 | Post Secondary Vocational Education |
| 15-2031 | Operations Research Analysts | 700 | 700 | 0 | 0.0 | 160 | 3 | Master's Degree |
| 17-0000 | Architecture & Engineering Occupations | 21,700 | 23,240 | 1,540 | 7.1 | 3,060 | | |
| 17-1011 | Architects, Except Landscape & Naval | 330 | 390 | 60 | 18.2 | 10 | 5 | Bachelor's Degree |
| 17-1012 | Landscape Architects | 170 | 170 | 0 | 0.0 | 10 | 5 | Bachelor's Degree |
| 17-1022 | Surveyors | 650 | 690 | 40 | 6.2 | 140 | 5 | Bachelor's Degree |
| 17-1099 | Architects, Surveyors, & Cartographers, All Other | 120 | 160 | 40 | 33.3 | 10 | 5 | Bachelor's Degree |
| 17-2011 | Aerospace Engineers | 120 | 130 | 10 | 8.3 | 30 | 5 | Bachelor's Degree |
| 17-2041 | Chemical Engineers | 170 | 190 | 20 | 11.8 | 20 | 5 | Bachelor's Degree |
| 17-2051 | Civil Engineers | 4,430 | 4,460 | 30 | 0.7 | 480 | 5 | Bachelor's Degree |
| 17-2061 | Computer Hardware Engineers | 1,220 | 1,360 | 140 | 11.5 | 130 | 5 | Bachelor's Degree |
| 17-2071 | Electrical Engineers | 1,840 | 1,940 | 100 | 5.4 | 240 | 5 | Bachelor's Degree |
| 17-2072 | Electronics Engineers, Except Computer | 1,050 | 1,160 | 110 | 10.5 | 140 | 5 | Bachelor's Degree |
| 17-2081 | Environmental Engineers | 410 | 480 | 70 | 17.1 | 60 | 5 | Bachelor's Degree |
| 17-2111 | Health & Safety Engrs, Ex Mining Safety Engrs & Inspectors | 410 | 450 | 40 | 9.8 | 50 | 5 | Bachelor's Degree |
| 17-2112 | Industrial Engineers | 1,150 | 1,200 | 50 | 4.3 | 130 | 5 | Bachelor's Degree |
| 17-2131 | Materials Engineers | 210 | 220 | 10 | 4.8 | 30 | 5 | Bachelor's Degree |
| 17-2141 | Mechanical Engineers | 1,100 | 1,200 | 100 | 9.1 | 240 | 5 | Bachelor's Degree |
| 17-2199 | Engineers, All Other | 1,380 | 1,500 | 120 | 8.7 | 200 | 5 | Bachelor's Degree |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | BLS Training Level | Education/Experience |
|---|--|------------------------------|---------------|----------------------|-------------|--------------------------|----------------------|
| | | 2001 ³ | 2008 | Number | Percent | | |
| 17-3011 | Architectural & Civil Drafters | 580 | 680 | 100 | 17.2 | 130 | 7 |
| 17-3012 | Electrical & Electronics Drafters | 500 | 550 | 50 | 10.0 | 110 | 7 |
| 17-3013 | Mechanical Drafters | 210 | 220 | 10 | 4.8 | 50 | 7 |
| 17-3022 | Civil Engineering Technicians | 970 | 980 | 10 | 1.0 | 140 | 6 |
| 17-3023 | Electrical & Electronic Engineering Technicians | 1,960 | 2,040 | 80 | 4.1 | 280 | 6 |
| 17-3024 | Electro-Mechanical Technicians | 580 | 630 | 50 | 8.6 | 80 | 6 |
| 17-3025 | Environmental Engineering Technicians | 150 | 190 | 40 | 26.7 | 20 | 6 |
| 17-3026 | Industrial Engineering Technicians | 350 | 380 | 30 | 8.6 | 50 | 6 |
| 17-3027 | Mechanical Engineering Technicians | 530 | 590 | 60 | 11.3 | 80 | 6 |
| 17-3031 | Surveying & Mapping Technicians | 240 | 270 | 30 | 12.5 | 60 | 10 |
| 17-3099 | Drafters, Engineering, & Map Technicians, All Other | 870 | 1,010 | 140 | 16.1 | 140 | 6 |
| 19-0000 Life, Physical, & Social Science Occupations | | 9,740 | 11,620 | 1,880 | 19.3 | 2,240 | |
| 19-1010 | Agricultural & Food Scientists | 110 | 150 | 40 | 36.4 | * | |
| 19-1021 | Biochemists & Biophysicists | 830 | 1,040 | 210 | 25.3 | 240 | 2 |
| 19-1022 | Microbiologists | 170 | 200 | 30 | 17.6 | 50 | 2 |
| 19-1042 | Medical Scientists, Except Epidemiologists | 560 | 670 | 110 | 19.6 | 100 | 2 |
| 19-1099 | Life Scientists, All Other | 1,490 | 1,780 | 290 | 19.5 | 410 | 2 |
| 19-2031 | Chemists | 610 | 760 | 150 | 24.6 | 150 | 5 |
| 19-2032 | Materials Scientists | 210 | 270 | 60 | 28.6 | 50 | 5 |
| 19-2041 | Environmental Scientists & Specialists, Incl Health Geoscientists, Except Hydrologists & Geographers | 390 | 470 | 80 | 20.5 | 100 | 5 |
| 19-2042 | Physical Scientists, All Other | 180 | 220 | 40 | 22.2 | 50 | 5 |
| 19-2099 | Market Research Analysts | 610 | 730 | 120 | 19.7 | 190 | 5 |
| 19-3021 | Clinical, Counseling, & School Psychologists | 900 | 1,060 | 160 | 17.8 | 150 | 5 |
| 19-3031 | Urban & Regional Planners | 820 | 920 | 100 | 12.2 | 140 | 3 |
| 19-3051 | Social Scientists & Related Workers, All Other | 410 | 450 | 40 | 9.8 | 70 | 3 |
| 19-3099 | Agricultural & Food Science Technicians | 640 | 740 | 100 | 15.6 | 120 | 3 |
| 19-4011 | Biological Technicians | 110 | 120 | 10 | 9.1 | 20 | 6 |
| 19-4021 | Chemical Technicians | 250 | 300 | 50 | 20.0 | 40 | 6 |
| 19-4031 | Environ Science & Protection Techs, Incl Health | 450 | 550 | 100 | 22.2 | 80 | 6 |
| 19-4091 | Life, Physical, & Social Science Techs, All Other | 160 | 170 | 10 | 6.3 | 40 | 6 |
| 19-4099 | | 840 | 1,020 | 180 | 21.4 | 240 | 6 |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|----------------|---|------------------------------|--------------|----------------------|-------------|-----------------------------------|--------------------------|---------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 21-0000 | Community & Social Services Occupations | 7,620 | 8,810 | 1,190 | 15.6 | 960 | | |
| 21-1011 | Substance Abuse & Behavioral Disorder Counselor | 600 | 700 | 100 | 16.7 | 90 | 3 | Master's Degree |
| 21-1012 | Educational, Vocational, & School Counselors | 1,090 | 1,240 | 150 | 13.8 | 160 | 3 | Master's Degree |
| 21-1013 | Marriage & Family Therapists | 130 | 140 | 10 | 7.7 | 20 | 3 | Master's Degree |
| 21-1014 | Mental Health Counselors | 390 | 420 | 30 | 7.7 | 60 | 3 | Master's Degree |
| 21-1015 | Rehabilitation Counselors | 310 | 340 | 30 | 9.7 | 50 | 3 | Master's Degree |
| 21-1021 | Child, Family, & School Social Workers | 880 | 1,010 | 130 | 14.8 | 70 | 5 | Bachelor's Degree |
| 21-1022 | Medical & Public Health Social Workers | 500 | 600 | 100 | 20.0 | 40 | 5 | Bachelor's Degree |
| 21-1023 | Mental Health & Substance Abuse Social Workers | 220 | 280 | 60 | 27.3 | 20 | 3 | Master's Degree |
| 21-1091 | Health Educators | 280 | 310 | 30 | 10.7 | 30 | 3 | Master's Degree |
| 21-1092 | Probation Officers & Correctional Treatment Specialists | 320 | 360 | 40 | 12.5 | 30 | 5 | Bachelor's Degree |
| 21-1093 | Social & Human Service Assistants | 750 | 1,000 | 250 | 33.3 | 90 | 10 | Moderate-Term On-The-Job Training |
| 21-2011 | Clergy | 360 | 390 | 30 | 8.3 | 70 | 1 | First Professional Degree |
| 21-2021 | Directors, Religious Activities & Education | 310 | 340 | 30 | 9.7 | 40 | 5 | Bachelor's Degree |
| 21-9099 | Counselors, Social & Religious Workers, All Other | 1,480 | 1,680 | 200 | 13.5 | 190 | 5 | Bachelor's Degree |
| 23-0000 | Legal Occupations | 6,120 | 6,520 | 400 | 6.5 | 490 | | |
| 23-1011 | Lawyers | 2,410 | 2,560 | 150 | 6.2 | 120 | 1 | First Professional Degree |
| 23-1021 | Admin Law Judges, Adjudicators, & Hearing Officers | 590 | 630 | 40 | 6.8 | 120 | 4 | Bachelor's or Higher & Some Work Exp. |
| 23-1023 | Judges, Magistrate Judges, & Magistrates | 490 | 490 | 0 | 0.0 | 100 | 4 | Bachelor's or Higher & Some Work Exp. |
| 23-2011 | Paralegals & Legal Assistants | 1,050 | 1,150 | 100 | 9.5 | 50 | 6 | Associate Degree |
| 23-2092 | Law Clerks | 450 | 450 | 0 | 0.0 | 30 | 5 | Bachelor's Degree |
| 23-2093 | Title Examiners, Abstractors, & Searchers | 260 | 260 | 0 | 0.0 | 20 | 10 | Moderate-Term On-The-Job Training |
| 23-9099 | Legal & Related Workers, All Other | 820 | 930 | 110 | 13.4 | 50 | 5 | Bachelor's Degree |

Table 6: Occupational Employment Projections^{1,2}
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Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|--------|----------------------|---------|-----------------------------------|--------------------------|----------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 25-0000 | Education, Training, & Library Occupations | 41,290 | 46,120 | 4,830 | 11.7 | 6,640 | | |
| 25-1011 | Business Teachers, Postsecondary | 350 | 410 | 60 | 17.1 | 70 | 2 | Doctoral Degree |
| 25-1021 | Computer Science Teachers, Postsecondary | 130 | 190 | 60 | 46.2 | 30 | 2 | Doctoral Degree |
| 25-1022 | Mathematical Science Teachers, Postsecondary | 270 | 310 | 40 | 14.8 | 60 | 2 | Doctoral Degree |
| 25-1032 | Engineering Teachers, Postsecondary | 340 | 390 | 50 | 14.7 | 70 | 2 | Doctoral Degree |
| 25-1041 | Agricultural Sciences Teachers, Postsecondary | 250 | 290 | 40 | 16.0 | 50 | 2 | Doctoral Degree |
| 25-1042 | Biological Science Teachers, Postsecondary | 220 | 250 | 30 | 13.6 | 50 | 2 | Doctoral Degree |
| 25-1052 | Chemistry Teachers, Postsecondary | 110 | 120 | 10 | 9.1 | 20 | 2 | Doctoral Degree |
| 25-1066 | Psychology Teachers, Postsecondary | 260 | 290 | 30 | 11.5 | 50 | 2 | Doctoral Degree |
| 25-1071 | Health Specialties Teachers, Postsecondary | 1,190 | 1,370 | 180 | 15.1 | 240 | 2 | Doctoral Degree |
| 25-1072 | Nursing Instructors & Teachers, Postsecondary | 150 | 170 | 20 | 13.3 | 30 | 3 | Master's Degree |
| 25-1081 | Education Teachers, Postsecondary | 270 | 310 | 40 | 14.8 | 50 | 2 | Doctoral Degree |
| 25-1112 | Law Teachers, Postsecondary | 150 | 170 | 20 | 13.3 | 30 | 2 | Doctoral Degree |
| 25-1121 | Art, Drama, & Music Teachers, Postsecondary | 400 | 470 | 70 | 17.5 | 80 | 2 | Doctoral Degree |
| 25-1122 | Communications Teachers, Postsecondary | 150 | 170 | 20 | 13.3 | 30 | 2 | Doctoral Degree |
| 25-1123 | English Lang & Literature Teachers, Postsecondary | 310 | 360 | 50 | 16.1 | 60 | 2 | Doctoral Degree |
| 25-1191 | Graduate Teaching Assistants | 3,380 | 3,890 | 510 | 15.1 | 690 | 5 | Bachelor's Degree |
| 25-1193 | Recreation & Fitness Studies Teachers, Postsecondary | 120 | 140 | 20 | 16.7 | 30 | 3 | Master's Degree |
| 25-1194 | Vocational Education Teachers, Postsecondary | 1,570 | 1,820 | 250 | 15.9 | 320 | 8 | Work Experience |
| 25-1199 | Postsecondary Teachers, All Other | 3,200 | 3,700 | 500 | 15.6 | 690 | 2 | Doctoral Degree |
| 25-2011 | Preschool Teachers, Except Special Education | 2,070 | 2,220 | 150 | 7.2 | 180 | 5 | Bachelor's Degree |
| 25-2012 | Kindergarten Teachers, Except Special Education | 720 | 770 | 50 | 6.9 | 60 | 5 | Bachelor's Degree |
| 25-2021 | Elementary School Teachers, Except Special Ed | 6,750 | 7,190 | 440 | 6.5 | 1,090 | 5 | Bachelor's Degree |
| 25-2022 | Mid School Teachers, Ex Special & Vocational Ed | 1,770 | 1,850 | 80 | 4.5 | 280 | 5 | Bachelor's Degree |
| 25-2031 | Secondary School Teachers, Ex Special & Voc Ed | 2,840 | 3,130 | 290 | 10.2 | 630 | 5 | Bachelor's Degree |
| 25-2032 | Vocational Education Teachers, Secondary School | 160 | 170 | 10 | 6.3 | 40 | 5 | Bachelor's Degree |
| 25-2041 | Special Ed Teachers, Preschool, Kindergarten, & Elem Sch | 660 | 810 | 150 | 22.7 | 60 | 5 | Bachelor's Degree |
| 25-2042 | Special Education Teachers, Middle School | 270 | 300 | 30 | 11.1 | 20 | 5 | Bachelor's Degree |
| 25-2043 | Special Education Teachers, Secondary School | 440 | 500 | 60 | 13.6 | 40 | 5 | Bachelor's Degree |
| 25-3011 | Adult Literacy, Remedial Ed, & GED Teachers & Inspectors | 530 | 590 | 60 | 11.3 | 40 | 5 | Bachelor's Degree |
| 25-3021 | Self-Enrichment Education Teachers | 1,440 | 1,640 | 200 | 13.9 | 110 | 8 | Work Experience |
| 25-399 | Teachers, Primary, Secondary, & Adult, All Other | 2,890 | 3,260 | 370 | 12.8 | 210 | 5 | Bachelor's Degree |

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2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|--|---|------------------------------|--------------|----------------------|-------------|-----------------------------------|--------------------------|---------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 25-4021 | Librarians | 790 | 810 | 20 | 2.5 | 110 | 3 | Master's Degree |
| 25-4031 | Library Technicians | 570 | 640 | 70 | 12.3 | 190 | 11 | Short-Term On-The-Job Training |
| 25-9021 | Farm & Home Management Advisors | 140 | 140 | 0 | 0.0 | 10 | 5 | Bachelor's Degree |
| 25-9031 | Instructional Coordinators | 400 | 450 | 50 | 12.5 | 40 | 3 | Master's Degree |
| 25-9041 | Teacher Assistants | 5,350 | 6,060 | 710 | 13.3 | 820 | 11 | Short-Term On-The-Job Training |
| 25-9099 | Education, Training, & Library Workers, All Other | 660 | 750 | 90 | 13.6 | 60 | 5 | Bachelor's Degree |
| 27-0000 Arts, Design, Entertainment, Sports, & Media Occs | | 7,420 | 8,620 | 1,200 | 16.2 | 1,060 | | |
| 27-1011 | Art Directors | 110 | 130 | 20 | 18.2 | 20 | 4 | Bachelor's or Higher & Some Work Exp. |
| 27-1014 | Multi-Media Artists & Animators | 130 | 180 | 50 | 38.5 | 20 | 5 | Bachelor's Degree |
| 27-1023 | Floral Designers | 230 | 250 | 20 | 8.7 | 20 | 10 | Moderate-Term On-The-Job Training |
| 27-1024 | Graphic Designers | 820 | 940 | 120 | 14.6 | 60 | 5 | Bachelor's Degree |
| 27-1025 | Interior Designers | 140 | 150 | 10 | 7.1 | 10 | 5 | Bachelor's Degree |
| 27-1026 | Merchandise Displayers & Window Trimmers | 230 | 250 | 20 | 8.7 | 20 | 10 | Moderate-Term On-The-Job Training |
| 27-1029 | Designers, All Other | 200 | 270 | 70 | 35.0 | 20 | 5 | Bachelor's Degree |
| 27-1099 | Art & Design Workers, All Other | 220 | 270 | 50 | 22.7 | 30 | 5 | Bachelor's Degree |
| 27-2012 | Producers & Directors | 190 | 220 | 30 | 15.8 | 30 | 4 | Bachelor's or Higher & Some Work Exp. |
| 27-2022 | Coaches & Scouts | 260 | 280 | 20 | 7.7 | 40 | 9 | Long-Term On-The-Job Training |
| 27-2041 | Music Directors & Composers | 190 | 210 | 20 | 10.5 | 30 | 4 | Bachelor's or Higher & Some Work Exp. |
| 27-2042 | Musicians & Singers | 910 | 1,020 | 110 | 12.1 | 130 | 9 | Long-Term On-The-Job Training |
| 27-2099 | Entertainers & Performers, Sports & Rel Workers | 640 | 740 | 100 | 15.6 | 90 | 9 | Long-Term On-The-Job Training |
| 27-3020 | News Analysts, Reporters & Correspondents | 210 | 220 | 10 | 4.8 | * | | |
| 27-3031 | Public Relations Specialists | 780 | 960 | 180 | 23.1 | 100 | 5 | Bachelor's Degree |
| 27-3041 | Editors | 550 | 630 | 80 | 14.5 | 130 | 5 | Bachelor's Degree |
| 27-3042 | Technical Writers | 380 | 450 | 70 | 18.4 | 90 | 5 | Bachelor's Degree |
| 27-3043 | Writers & Authors | 120 | 140 | 20 | 16.7 | 20 | 5 | Bachelor's Degree |
| 27-3091 | Interpreters & Translators | 110 | 110 | 0 | 0.0 | 20 | 9 | Long-Term On-The-Job Training |
| 27-3099 | Media & Communication Workers, All Other | 230 | 270 | 40 | 17.4 | 30 | 9 | Long-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
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Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience | | | |
|----------------|---|------------------------------|---------------|----------------------|-------------|-----------------------------------|--------------------------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | 50 | 20 | 7 | Post Secondary Vocational Education |
| 27-4011 | Audio & Video Equipment Technicians | 230 | 280 | 50 | 20.0 | 20.0 | 20 | 9 | Long-Term On-The-Job Training | Moderate-Term On-The-Job Training | |
| 27-4014 | Sound Engineering Technicians | 100 | 120 | 20 | 8.3 | 30 | 30 | 9 | Post Secondary Vocational Education | Post Secondary Vocational Education | |
| 27-4021 | Photographers | 240 | 260 | 20 | 8.3 | 20 | 20 | 7 | Long-Term On-The-Job Training | Long-Term On-The-Job Training | |
| 27-4099 | Media & Communication Equipt Workers, All Other | 200 | 270 | 70 | 35.0 | 50 | 50 | 10 | Moderate-Term On-The-Job Training | Moderate-Term On-The-Job Training | |
| 29-0000 | Healthcare Practitioners & Technical Occupations | 28,000 | 32,270 | 4,270 | 15.3 | 4,610 | | | | | |
| 29-1020 | Dentists | 680 | 710 | 30 | 4.4 | * | | | | | |
| 29-1031 | Dietitians & Nutritionists | 140 | 160 | 20 | 14.3 | 30 | 30 | 5 | Bachelor's Degree | Bachelor's Degree | |
| 29-1041 | Optometrists | 240 | 270 | 30 | 12.5 | 30 | 30 | 1 | First Professional Degree | First Professional Degree | |
| 29-1051 | Pharmacists | 1,030 | 1,210 | 180 | 17.5 | 230 | 230 | 1 | First Professional Degree | First Professional Degree | |
| 29-1062 | Family & General Practitioners | 260 | 290 | 30 | 11.5 | 30 | 30 | 1 | First Professional Degree | First Professional Degree | |
| 29-1067 | Surgeons | 120 | 120 | 0 | 0.0 | 10 | 10 | 1 | First Professional Degree | First Professional Degree | |
| 29-1071 | Physician Assistants | 280 | 340 | 60 | 21.4 | 50 | 50 | 5 | Bachelor's Degree | Bachelor's Degree | |
| 29-1111 | Registered Nurses | 9,490 | 11,240 | 1,750 | 18.4 | 1,440 | 1,440 | 6 | Associate Degree | Associate Degree | |
| 29-1122 | Occupational Therapists | 240 | 290 | 50 | 20.8 | 50 | 50 | 5 | Bachelor's Degree | Bachelor's Degree | |
| 29-1123 | Physical Therapists | 570 | 670 | 100 | 17.5 | 110 | 110 | 3 | Master's Degree | Master's Degree | |
| 29-1126 | Respiratory Therapists | 510 | 620 | 110 | 21.6 | 100 | 100 | 6 | Associate Degree | Associate Degree | |
| 29-1127 | Speech-Language Pathologists | 290 | 330 | 40 | 13.8 | 50 | 50 | 3 | Master's Degree | Master's Degree | |
| 29-1131 | Veterinarians | 160 | 190 | 30 | 18.8 | 20 | 20 | 1 | First Professional Degree | First Professional Degree | |
| 29-1199 | Health Diagnosing & Treating Practitioners, All Other | 860 | 990 | 130 | 15.1 | 130 | 130 | 1 | First Professional Degree | First Professional Degree | |
| 29-2011 | Medical & Clinical Laboratory Technologists | 510 | 580 | 70 | 13.7 | 90 | 90 | 5 | Bachelor's Degree | Bachelor's Degree | |
| 29-2012 | Medical & Clinical Laboratory Technicians | 450 | 500 | 50 | 11.1 | 80 | 80 | 6 | Associate Degree | Associate Degree | |
| 29-2021 | Dental Hygienists | 1,110 | 1,300 | 190 | 17.1 | 120 | 120 | 6 | Associate Degree | Associate Degree | |
| 29-2031 | Cardiovascular Technologists & Technicians | 140 | 160 | 20 | 14.3 | 20 | 20 | 6 | Associate Degree | Associate Degree | |
| 29-2032 | Diagnostic Medical Sonographers | 120 | 140 | 20 | 16.7 | 20 | 20 | 6 | Associate Degree | Associate Degree | |
| 29-2034 | Radioologic Technologists & Technicians | 820 | 930 | 110 | 13.4 | 130 | 130 | 6 | Associate Degree | Associate Degree | |
| 29-2041 | Emergency Medical Technicians & Paramedics | 1,230 | 1,330 | 100 | 8.1 | 230 | 230 | 7 | Post Secondary Vocational Education | Post Secondary Vocational Education | |
| 29-2052 | Pharmacy Technicians | 890 | 1,080 | 190 | 21.3 | 180 | 180 | 10 | Moderate-Term On-The-Job Training | Moderate-Term On-The-Job Training | |
| 29-2055 | Surgical Technologists | 290 | 330 | 40 | 13.8 | 60 | 60 | 7 | Post Secondary Vocational Education | Post Secondary Vocational Education | |

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|-------------|--|------------------------------|----------------|----------------------|-------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 29-2056 | Veterinary Technologists & Technicians | 350 | 380 | 30 | 8.6 | 70 | 6 | Associate Degree |
| 29-2061 | Licensed Practical & Licensed Vocational Nurses | 2,510 | 2,850 | 340 | 13.5 | 480 | 7 | Post Secondary Vocational Education |
| 29-2071 | Medical Records & Health Information Technicians | 560 | 690 | 130 | 23.2 | 100 | 6 | Associate Degree |
| 29-2081 | Opticians, Dispensing | 360 | 380 | 20 | 5.6 | 50 | 9 | Long-Term On-The-Job Training |
| 29-2099 | Health Technologists & Technicians, All Other | 220 | 260 | 40 | 18.2 | 40 | 5 | Bachelor's Degree |
| 29-9010 | Occupational Health & Safety Specialists & Techs | 110 | 120 | 10 | 9.1 | * | | |
| 29-9199 | Health Professionals & Technicians, All Other | 3,420 | 3,770 | 350 | 10.2 | 650 | 6 | Associate Degree |
| 31-39-0000 | Service Occupations | 108,970 | 122,230 | 13,260 | 12.2 | 27,390 | | |
| 31-0000 | Healthcare Support Occupations | 13,020 | 15,750 | 2,730 | 21.0 | 1,870 | | |
| 31-1011 | Home Health Aides | 1,290 | 1,560 | 270 | 20.9 | 130 | 11 | Short-Term On-The-Job Training |
| 31-1012 | Nursing Aides, Orderlies, & Attendants | 5,500 | 6,660 | 1,160 | 21.1 | 540 | 11 | Short-Term On-The-Job Training |
| 31-2021 | Physical Therapist Assistants | 100 | 130 | 30 | 30.0 | 20 | 6 | Associate Degree |
| 31-2022 | Physical Therapist Aides | 120 | 150 | 30 | 25.0 | 30 | 11 | Short-Term On-The-Job Training |
| 31-9011 | Massage Therapists | 240 | 260 | 20 | 8.3 | 40 | 7 | Post Secondary Vocational Education |
| 31-9091 | Dental Assistants | 1,320 | 1,560 | 240 | 18.2 | 180 | 10 | Moderate-Term On-The-Job Training |
| 31-9092 | Medical Assistants | 2,150 | 2,760 | 610 | 28.4 | 450 | 10 | Moderate-Term On-The-Job Training |
| 31-9093 | Medical Equipment Preparers | 160 | 180 | 20 | 12.5 | 30 | 11 | Short-Term On-The-Job Training |
| 31-9094 | Medical Transcriptionists | 290 | 320 | 30 | 10.3 | 60 | 7 | Post Secondary Vocational Education |
| 31-9095 | Pharmacy Aides | 380 | 450 | 70 | 18.4 | 80 | 11 | Short-Term On-The-Job Training |
| 31-9096 | Veterinary Assistants & Lab Animal Caretakers | 150 | 170 | 20 | 13.3 | 30 | 11 | Short-Term On-The-Job Training |
| 31-9099 | Healthcare Support Workers, All Other | 1,320 | 1,550 | 230 | 17.4 | 280 | 11 | Short-Term On-The-Job Training |
| 33-0000 | Protective Service Occupations | 17,440 | 18,920 | 1,480 | 8.5 | 3,700 | | |
| 33-1012 | First-Line Sups/Managers of Police & Detectives | 590 | 650 | 60 | 10.2 | 120 | 8 | Work Experience |
| 33-1021 | First-Line Sups/Mgrs of Fire Fighting & Prevention | 330 | 350 | 20 | 6.1 | 80 | 8 | Work Experience |

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|----------------|---|------------------------------|---------------|----------------------|-------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 33-1099 | First-Line Sups/Mgrs, Protective Serv Wrks, All Other | 290 | 310 | 20 | 6.9 | 60 | 8 | Work Experience |
| 33-2011 | Fire Fighters | 1,590 | 1,680 | 90 | 5.7 | 290 | 9 | Long-Term On-The-Job Training |
| 33-3012 | Correctional Officers & Jailers | 630 | 690 | 60 | 9.5 | 110 | 10 | Moderate-Term On-The-Job Training |
| 33-3021 | Detectives & Criminal Investigators | 750 | 820 | 70 | 9.3 | 120 | 8 | Work Experience |
| 33-3051 | Police & Sheriff's Patrol Officers | 3,850 | 4,330 | 480 | 12.5 | 600 | 9 | Long-Term On-The-Job Training |
| 33-9021 | Private Detectives & Investigators | 130 | 150 | 20 | 15.4 | 30 | 8 | Work Experience |
| 33-9032 | Security Guards | 7,540 | 8,110 | 570 | 7.6 | 1,510 | 11 | Short-Term On-The-Job Training |
| 33-9091 | Crossing Guards | 320 | 330 | 10 | 3.1 | 80 | 11 | Short-Term On-The-Job Training |
| 33-9099 | Protective Service Workers, All Other | 1,420 | 1,500 | 80 | 5.6 | 700 | 11 | Short-Term On-The-Job Training |
| 35-0000 | Food Preparation & Serving Related Occupations | 45,060 | 50,430 | 5,370 | 11.9 | 15,910 | | |
| 35-1011 | Chefs & Head Cooks | 540 | 580 | 40 | 7.4 | 130 | 7 | Post Secondary Vocational Education |
| 35-1012 | First-Line Sups/Mgrs of Food Prep & Serving Wrks | 3,000 | 3,260 | 260 | 8.7 | 550 | 8 | Work Experience |
| 35-2011 | Cooks, Fast Food | 1,960 | 2,000 | 40 | 2.0 | 410 | 11 | Short-Term On-The-Job Training |
| 35-2012 | Cooks, Institution & Cafeteria | 950 | 1,000 | 50 | 5.3 | 200 | 9 | Long-Term On-The-Job Training |
| 35-2014 | Cooks, Restaurant | 2,790 | 3,270 | 480 | 17.2 | 630 | 9 | Long-Term On-The-Job Training |
| 35-2015 | Cooks, Short Order | 1,740 | 1,790 | 50 | 2.9 | 370 | 11 | Short-Term On-The-Job Training |
| 35-2021 | Food Preparation Workers | 5,620 | 6,050 | 430 | 7.7 | 1,640 | 11 | Short-Term On-The-Job Training |
| 35-3011 | Bartenders | 2,780 | 3,040 | 260 | 9.4 | 800 | 11 | Short-Term On-The-Job Training |
| 35-3021 | Comb Food Prep & Serving Wrks, Incl Fast Food | 11,290 | 13,650 | 2,360 | 20.9 | 5,550 | 11 | Short-Term On-The-Job Training |
| 35-3022 | Counter Attends, Cafe, Food Concess, & Coffee Shop | 2,070 | 2,290 | 220 | 10.6 | 1,290 | 11 | Short-Term On-The-Job Training |
| 35-3031 | Waiters & Waitresses | 6,720 | 7,680 | 960 | 14.3 | 2,870 | 11 | Short-Term On-The-Job Training |
| 35-3041 | Food Servers, Nonrestaurant | 460 | 520 | 60 | 13.0 | 160 | 11 | Short-Term On-The-Job Training |
| 35-9011 | Dining Rm & Cafeteria Attendants & Bartender Helpers | 1,520 | 1,520 | 0 | 0.0 | 370 | 11 | Short-Term On-The-Job Training |
| 35-9021 | Dishwashers | 1,930 | 1,930 | 0 | 0.0 | 540 | 11 | Short-Term On-The-Job Training |
| 35-9031 | Hosts & Hostess, Restaurant, Lounge, & Coffee Shop | 1,440 | 1,620 | 180 | 12.5 | 330 | 11 | Short-Term On-The-Job Training |
| 35-9099 | Food Prep & Serving Related Workers, All Other | 250 | 230 | -20 | -8.0 | 70 | 11 | Short-Term On-The-Job Training |

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|----------------|--|------------------------------|---------------|----------------------|-------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 37-0000 | Building & Grounds Cleaning & Maintenance Occup | 19,230 | 20,910 | 1,680 | 8.7 | 2,910 | | |
| 37-1011 | First-Line Sups/Mgrs of Housekeep & Janitor Wrks | 760 | 800 | 40 | 5.3 | 150 | 8 | Work Experience |
| 37-1012 | First-Line Sups/Mgrs of Lndscp, Lwn Serv, & Grndskeep Wrk | 580 | 600 | 20 | 3.4 | 20 | 8 | Work Experience |
| 37-2011 | Janitors & Clean, Ex Maids & Housekeep Cleaners | 8,610 | 9,210 | 600 | 7.0 | 1,130 | 11 | Short-Term On-The-Job Training |
| 37-2012 | Maids & Housekeeping Cleaners | 3,370 | 3,820 | 450 | 13.4 | 550 | 11 | Short-Term On-The-Job Training |
| 37-2021 | Pest Control Workers | 320 | 360 | 40 | 12.5 | 50 | 10 | Moderate-Term On-The-Job Training |
| 37-3011 | Landscape & Groundskeeping Workers | 4,920 | 5,410 | 490 | 10.0 | 910 | 11 | Short-Term On-The-Job Training |
| 37-3013 | Tree Trimmers & Pruners | 180 | 180 | 0 | 0.0 | 30 | 11 | Short-Term On-The-Job Training |
| 37-9099 | Bldng & Grounds Cleaning & Maint Wrks, All Other | 490 | 530 | 40 | 8.2 | 70 | 11 | Short-Term On-The-Job Training |
| 39-0000 | Personal Care & Service Occupations | 14,220 | 16,220 | 2,000 | 14.1 | 3,000 | | |
| 39-1021 | First-Line Sups/Mgrs of Personal Service Workers | 590 | 650 | 60 | 10.2 | 120 | 8 | Work Experience |
| 39-2021 | Nonfarm Animal Caretakers | 560 | 660 | 100 | 17.9 | 90 | 11 | Short-Term On-The-Job Training |
| 39-3011 | Gaming Dealers | 240 | 270 | 30 | 12.5 | 60 | 7 | Post Secondary Vocational Education |
| 39-3031 | Ushers, Lobby Attendants, & Ticket Takers | 480 | 580 | 100 | 20.8 | 320 | 11 | Short-Term On-The-Job Training |
| 39-3091 | Amusement & Recreation Attendants | 880 | 980 | 100 | 11.4 | 230 | 11 | Short-Term On-The-Job Training |
| 39-3099 | Entertainment Attendants & Rel Workers, All Other | 230 | 240 | 10 | 4.3 | 40 | 11 | Short-Term On-The-Job Training |
| 39-3199 | Gaming Workers, All Other | 110 | 130 | 20 | 18.2 | 30 | 10 | Moderate-Term On-The-Job Training |
| 39-4021 | Funeral Attendants | 100 | 120 | 20 | 20.0 | 20 | 11 | Short-Term On-The-Job Training |
| 39-5012 | Hairdressers, Hairstylists, & Cosmetologists | 950 | 1,000 | 50 | 5.3 | 170 | 7 | Post Secondary Vocational Education |
| 39-5092 | Manicurists & Pedicurists | 200 | 240 | 40 | 20.0 | 40 | 7 | Post Secondary Vocational Education |
| 39-5094 | Skin Care Specialists | 160 | 180 | 20 | 12.5 | 30 | 7 | Post Secondary Vocational Education |
| 39-6011 | Baggage Porters & Bellhops | 110 | 120 | 10 | 9.1 | 30 | 11 | Short-Term On-The-Job Training |
| 39-6021 | Tour Guides & Escorts | 120 | 130 | 10 | 8.3 | 30 | 10 | Moderate-Term On-The-Job Training |
| 39-6031 | Flight Attendants | 1,090 | 1,250 | 160 | 14.7 | 290 | 9 | Long-Term On-The-Job Training |
| 39-9011 | Child Care Workers | 1,640 | 1,920 | 280 | 17.1 | 430 | 11 | Short-Term On-The-Job Training |
| 39-9021 | Personal & Home Care Aides | 1,700 | 2,110 | 410 | 24.1 | 200 | 11 | Short-Term On-The-Job Training |
| 39-9031 | Fitness Trainers & Aerobics Instructors | 1,520 | 1,720 | 200 | 13.2 | 230 | 7 | Post Secondary Vocational Education |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|----------------|--|------------------------------|----------------|----------------------|-------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 39-9032 | Recreation Workers | 2,170 | 2,390 | 220 | 10.1 | 330 | 5 | Bachelor's Degree |
| 39-9099 | Personal Care & Service Workers, All Other | 1,370 | 1,530 | 160 | 11.7 | 310 | 11 | Short-Term On-The-Job Training |
| 41-0000 | Sales & Related Occupations | 71,690 | 79,460 | 7,770 | 10.8 | 17,800 | | |
| 41-1011 | First-Line Sups/Mgrs of Retail Sales Workers | 5,950 | 6,720 | 770 | 12.9 | 630 | 8 | Work Experience |
| 41-1012 | First-Line Sups/Mgrs of Non-Retail Sales Workers | 1,840 | 1,950 | 110 | 6.0 | 190 | 8 | Work Experience |
| 41-2011 | Cashiers | 16,110 | 18,100 | 1,990 | 12.4 | 5,650 | 11 | Short-Term On-The-Job Training |
| 41-2021 | Counter & Rental Clerks | 2,500 | 2,810 | 310 | 12.4 | 870 | 11 | Short-Term On-The-Job Training |
| 41-2022 | Parts Salespersons | 930 | 940 | 10 | 1.1 | 200 | 10 | Moderate-Term On-The-Job Training |
| 41-2031 | Retail Salespersons | 19,680 | 22,090 | 2,410 | 12.2 | 5,700 | 11 | Short-Term On-The-Job Training |
| 41-3011 | Advertising Sales Agents | 520 | 590 | 70 | 13.5 | 80 | 10 | Moderate-Term On-The-Job Training |
| 41-3021 | Insurance Sales Agents | 730 | 780 | 50 | 6.8 | 130 | 5 | Bachelor's Degree |
| 41-3031 | Securities, Commodities, & Financial Serv Sales | 510 | 540 | 30 | 5.9 | 30 | 5 | Bachelor's Degree |
| 41-3041 | Travel Agents | 590 | 600 | 10 | 1.7 | 100 | 7 | Post Secondary Vocational Education |
| 41-4011 | Sales Reps, Wholesale & Mfg, Tech & Scientific Products | 3,450 | 3,720 | 270 | 7.8 | 680 | 10 | Moderate-Term On-The-Job Training |
| 41-4012 | Sales Reps, Wholesale & Mfg, Ex Tech & Scientific Products | 10,660 | 11,400 | 740 | 6.9 | 2,090 | 10 | Moderate-Term On-The-Job Training |
| 41-9011 | Demonstrators & Product Promoters | 1,030 | 1,150 | 120 | 11.7 | 250 | 10 | Moderate-Term On-The-Job Training |
| 41-9022 | Real Estate Sales Agents | 470 | 510 | 40 | 8.5 | 60 | 7 | Post Secondary Vocational Education |
| 41-9031 | Sales Engineers | 710 | 800 | 90 | 12.7 | 140 | 5 | Bachelor's Degree |
| 41-9041 | Telemarketers | 2,200 | 2,350 | 150 | 6.8 | 330 | 11 | Short-Term On-The-Job Training |
| 41-9091 | Dr-to-Dr Sales Wrkrs, Nws & St Vndrs, & Rel Wrkrs | 230 | 260 | 30 | 13.0 | 40 | 11 | Short-Term On-The-Job Training |
| 41-9099 | Sales & Related Workers, All Other | 3,540 | 4,100 | 560 | 15.8 | 580 | 10 | Moderate-Term On-The-Job Training |
| 43-0000 | Office & Administrative Support Occupations | 127,600 | 134,860 | 7,260 | 5.7 | 19,170 | | |
| 43-1011 | First-Line Sups/Mgrs of Office & Admin Support Wrkrs | 8,190 | 8,640 | 450 | 5.5 | 1,120 | 8 | Work Experience |
| 43-2011 | Switchboard Operators, Including Answering Service | 1,030 | 890 | -140 | -13.6 | 200 | 11 | Short-Term On-The-Job Training |
| 43-2021 | Telephone Operators | 500 | 360 | -140 | -28.0 | 90 | 11 | Short-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|--------|----------------------|---------|-----------------------------------|--------------------------|-----------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 43-3011 | Bill & Account Collectors | 1,750 | 1,960 | 210 | 12.0 | 320 | 11 | Short-Term On-The-Job Training |
| 43-3021 | Billing & Posting Clerks & Machine Operators | 2,820 | 2,850 | 30 | 1.1 | 480 | 11 | Short-Term On-The-Job Training |
| 43-3031 | Bookkeeping, Accounting, & Auditing Clerks | 8,750 | 8,950 | 200 | 2.3 | 1,170 | 10 | Moderate-Term On-The-Job Training |
| 43-3051 | Payroll & Timekeeping Clerks | 1,090 | 1,100 | 10 | 0.9 | 220 | 11 | Short-Term On-The-Job Training |
| 43-3061 | Procurement Clerks | 270 | 260 | -10 | -3.7 | 40 | 11 | Short-Term On-The-Job Training |
| 43-3071 | Tellers | 2,080 | 2,250 | 170 | 8.2 | 740 | 11 | Short-Term On-The-Job Training |
| 43-4011 | Brokerage Clerks | 210 | 180 | -30 | -14.3 | 20 | 10 | Moderate-Term On-The-Job Training |
| 43-4021 | Correspondence Clerks | 140 | 120 | -20 | -14.3 | 30 | 11 | Short-Term On-The-Job Training |
| 43-4031 | Court, Municipal, & License Clerks | 520 | 570 | 50 | 9.6 | 60 | 11 | Short-Term On-The-Job Training |
| 43-4041 | Credit Authorizers, Checkers, & Clerks | 280 | 300 | 20 | 7.1 | 20 | 11 | Short-Term On-The-Job Training |
| 43-4051 | Customer Service Representatives | 9,690 | 11,500 | 1,810 | 18.7 | 610 | 10 | Moderate-Term On-The-Job Training |
| 43-4061 | Eligibility Interviewers, Government Programs | 1,110 | 1,040 | -70 | -6.3 | 220 | 10 | Moderate-Term On-The-Job Training |
| 43-4071 | File Clerks | 1,580 | 1,590 | 10 | 0.6 | 360 | 11 | Short-Term On-The-Job Training |
| 43-4081 | Hotel, Motel, & Resort Desk Clerks | 640 | 790 | 150 | 23.4 | 220 | 11 | Short-Term On-The-Job Training |
| 43-4111 | Interviewers, Except Eligibility & Loan | 1,080 | 1,210 | 130 | 12.0 | 170 | 11 | Short-Term On-The-Job Training |
| 43-4121 | Library Assistants, Clerical | 500 | 560 | 60 | 12.0 | 170 | 11 | Short-Term On-The-Job Training |
| 43-4131 | Loan Interviewers & Clerks | 490 | 430 | -60 | -12.2 | 20 | 11 | Short-Term On-The-Job Training |
| 43-4141 | New Accounts Clerks | 690 | 820 | 130 | 18.8 | 110 | 8 | Work Experience |
| 43-4151 | Order Clerks | 3,330 | 2,890 | -440 | -13.2 | 460 | 11 | Short-Term On-The-Job Training |
| 43-4161 | Human Resources Assist, Ex Pay & Timekeepers | 890 | 990 | 100 | 11.2 | 150 | 11 | Short-Term On-The-Job Training |
| 43-4171 | Receptionists & Information Clerks | 5,880 | 6,520 | 640 | 10.9 | 960 | 11 | Short-Term On-The-Job Training |
| 43-4181 | Reservation & Trans Ticket Agents & Travel Clerks | 510 | 560 | 50 | 9.8 | 100 | 11 | Short-Term On-The-Job Training |
| 43-4999 | Financial, Information, & Record Clerks, All Other | 960 | 1,080 | 120 | 12.5 | 90 | 11 | Short-Term On-The-Job Training |
| 43-5011 | Cargo & Freight Agents | 480 | 500 | 20 | 4.2 | 70 | 10 | Moderate-Term On-The-Job Training |
| 43-5021 | Couriers & Messengers | 1,330 | 1,340 | 10 | 0.8 | 260 | 11 | Short-Term On-The-Job Training |
| 43-5031 | Police, Fire, & Ambulance Dispatchers | 430 | 470 | 40 | 9.3 | 50 | 10 | Moderate-Term On-The-Job Training |
| 43-5032 | Dispatchers, Except Police, Fire, & Ambulance | 970 | 1,070 | 100 | 10.3 | 120 | 10 | Moderate-Term On-The-Job Training |
| 43-5041 | Meter Readers, Utilities | 190 | 210 | 20 | 10.5 | 30 | 11 | Short-Term On-The-Job Training |
| 43-5051 | Postal Service Clerks | 360 | 380 | 20 | 5.6 | 60 | 11 | Short-Term On-The-Job Training |
| 43-5052 | Postal Service Mail Carriers | 2,330 | 2,450 | 120 | 5.2 | 500 | 11 | Short-Term On-The-Job Training |
| 43-5053 | Postal Serv Mail Sort, Processors, & Processing | 2,110 | 2,210 | 100 | 4.7 | 320 | 11 | Short-Term On-The-Job Training |
| 43-5061 | Production, Planning, & Expediting Clerks | 1,900 | 2,070 | 170 | 8.9 | 230 | 11 | Short-Term On-The-Job Training |
| 43-5071 | Shipping, Receiving, & Traffic Clerks | 5,940 | 6,330 | 390 | 6.6 | 860 | 11 | Short-Term On-The-Job Training |
| 43-5081 | Stock Clerks & Order Fillers | 7,740 | 8,450 | 710 | 9.2 | 2,140 | 11 | Short-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience | | |
|----------------|---|------------------------------|---------------|----------------------|-------------|-----------------------------------|--------------------------|-------------------------------------|----|--|
| | | 2001 ³ | 2008 | Number | Percent | | | 50 | 11 | |
| 43-5111 | Weigh, Measure, Check, & Sample, Recordkeeping | 270 | 310 | 40 | 14.8 | | | | | |
| 43-6011 | Executive Secretaries & Administrative Assistants | 8,950 | 9,430 | 480 | 5.4 | 1,080 | 10 | Moderate-Term On-The-Job Training | | |
| 43-6012 | Legal Secretaries | 910 | 930 | 20 | 2.2 | 110 | 7 | Post Secondary Vocational Education | | |
| 43-6013 | Medical Secretaries | 3,600 | 3,960 | 360 | 10.0 | 440 | 7 | Post Secondary Vocational Education | | |
| 43-6014 | Secretaries, Except Legal, Medical, & Executive | 6,900 | 7,140 | 240 | 3.5 | 820 | 10 | Moderate-Term On-The-Job Training | | |
| 43-9011 | Computer Operators | 1,050 | 880 | -170 | -16.2 | 120 | 10 | Moderate-Term On-The-Job Training | | |
| 43-9021 | Data Entry Keyers | 2,050 | 1,970 | -80 | -3.9 | 220 | 10 | Moderate-Term On-The-Job Training | | |
| 43-9022 | Word Processors & Typists | 820 | 690 | -130 | -15.9 | 110 | 10 | Moderate-Term On-The-Job Training | | |
| 43-9041 | Insurance Claims & Policy Processing Clerks | 980 | 870 | -110 | -11.2 | 110 | 10 | Moderate-Term On-The-Job Training | | |
| 43-9051 | Mail Clerks & Mail Mach Ops, Ex Postal Service | 800 | 840 | 40 | 5.0 | 170 | 11 | Short-Term On-The-Job Training | | |
| 43-9061 | Office Clerks, General | 18,620 | 19,990 | 1,370 | 7.4 | 2,800 | 11 | Short-Term On-The-Job Training | | |
| 43-9071 | Office Machine Operators, Except Computer | 460 | 400 | -60 | -13.0 | 110 | 11 | Short-Term On-The-Job Training | | |
| 43-9081 | Proofreaders & Copy Markers | 140 | 140 | 0 | 0.0 | 40 | 11 | Short-Term On-The-Job Training | | |
| 43-9199 | Office & Administrative Support Workers, All Other | 3,220 | 3,360 | 140 | 4.3 | 380 | 10 | Moderate-Term On-The-Job Training | | |
| 45-0000 | Farming, Fishing, & Forestry Occupations | 580 | 640 | 60 | 10.3 | 100 | | | | |
| 45-1011 | First-Line Sups/Mgrs of Farm, Fish, & Forest Wrkrs | 240 | 280 | 40 | 16.7 | 60 | 8 | Work Experience | | |
| 45-2062 | Farmwrks & Labor, Crop, Nursery, & Greenhouse | 180 | 190 | 10 | 5.6 | 20 | 11 | Short-Term On-The-Job Training | | |
| 45-2099 | Agricultural Workers, All Other | 110 | 120 | 10 | 9.1 | 10 | 11 | Short-Term On-The-Job Training | | |
| 47-0000 | Construction & Extraction Occupations | 38,260 | 45,620 | 7,360 | 19.2 | 5,350 | | | | |
| 47-1011 | First-Line Sups/Mgrs of Construction Trades | 2,150 | 2,520 | 370 | 17.2 | 370 | 8 | Work Experience | | |
| 47-2021 | Brickmasons & Blockmasons | 180 | 220 | 40 | 22.2 | 30 | 9 | Long-Term On-The-Job Training | | |
| 47-2031 | Carpenters | 6,380 | 7,520 | 1,140 | 17.9 | 810 | 9 | Long-Term On-The-Job Training | | |
| 47-2041 | Carpet Installers | 880 | 1,040 | 160 | 18.2 | 110 | 10 | Moderate-Term On-The-Job Training | | |
| 47-2042 | Floor Layers, Except Carpet, Wood, & Hard Tiles | 100 | 120 | 20 | 20.0 | 10 | 10 | Moderate-Term On-The-Job Training | | |
| 47-2044 | Tile & Marble Setters | 250 | 300 | 50 | 20.0 | 30 | 9 | Long-Term On-The-Job Training | | |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|-------|----------------------|---------|-----------------------------------|--------------------------|-----------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 47-2051 | Cement Masons & Concrete Finishers | 630 | 720 | 90 | 14.3 | 40 | 9 | Long-Term On-The-Job Training |
| 47-2053 | Terrazzo Workers & Finishers | 100 | 110 | 10 | 10.0 | 10 | 9 | Long-Term On-The-Job Training |
| 47-2061 | Construction Laborers | 5,380 | 6,580 | 1,200 | 22.3 | 380 | 10 | Moderate-Term On-The-Job Training |
| 47-2072 | Pile-Driver Operators | 110 | 130 | 20 | 18.2 | 10 | 10 | Moderate-Term On-The-Job Training |
| 47-2073 | Operating Engineers & Oth Const Equipment Ops | 1,650 | 1,870 | 220 | 13.3 | 270 | 10 | Moderate-Term On-The-Job Training |
| 47-2081 | Drywall & Ceiling Tile Installers | 920 | 1,140 | 220 | 23.9 | 70 | 10 | Moderate-Term On-The-Job Training |
| 47-2082 | Tapers | 290 | 360 | 70 | 24.1 | 20 | 10 | Moderate-Term On-The-Job Training |
| 47-2111 | Electricians | 3,820 | 4,760 | 940 | 24.6 | 550 | 9 | Long-Term On-The-Job Training |
| 47-2121 | Glaziers | 850 | 1,030 | 180 | 21.2 | 120 | 9 | Long-Term On-The-Job Training |
| 47-2130 | Insulation Workers | 410 | 470 | 60 | 14.6 | * | | |
| 47-2141 | Painters, Construction & Maintenance | 2,390 | 2,810 | 420 | 17.6 | 320 | 10 | Moderate-Term On-The-Job Training |
| 47-2151 | Pipefitters | 150 | 170 | 20 | 13.3 | 20 | 10 | Moderate-Term On-The-Job Training |
| 47-2152 | Plumbers, Pipefitters, & Steamfitters | 2,130 | 2,500 | 370 | 17.4 | 260 | 9 | Long-Term On-The-Job Training |
| 47-2161 | Plasterers & Stucco Masons | 730 | 900 | 170 | 23.3 | 110 | 9 | Long-Term On-The-Job Training |
| 47-2171 | Reinforcing Iron & Rebar Workers | 600 | 740 | 140 | 23.3 | 50 | 9 | Long-Term On-The-Job Training |
| 47-2181 | Roofers | 1,440 | 1,760 | 320 | 22.2 | 250 | 10 | Moderate-Term On-The-Job Training |
| 47-2211 | Sheet Metal Workers | 960 | 1,190 | 230 | 24.0 | 160 | 10 | Moderate-Term On-The-Job Training |
| 47-2221 | Structural Iron & Steel Workers | 980 | 1,180 | 200 | 20.4 | 80 | 9 | Long-Term On-The-Job Training |
| 47-3011 | Helpers--Brick, Block, Stonemasons, & Tile & Marble | 140 | 180 | 40 | 28.6 | 60 | 11 | Short-Term On-The-Job Training |
| 47-3012 | Helpers--Carpenters | 430 | 490 | 60 | 14.0 | 160 | 11 | Short-Term On-The-Job Training |
| 47-3013 | Helpers--Electricians | 420 | 500 | 80 | 19.0 | 160 | 11 | Short-Term On-The-Job Training |
| 47-3014 | Helpers--Paint, Paperhanger, Plaster, & Stucco | 110 | 130 | 20 | 18.2 | 40 | 11 | Short-Term On-The-Job Training |
| 47-3015 | Helpers--Pipefitter, Plumber, Pipefitter, & Steamfitters | 250 | 290 | 40 | 16.0 | 90 | 11 | Short-Term On-The-Job Training |
| 47-3016 | Helpers--Roofers | 110 | 130 | 20 | 18.2 | 40 | 11 | Short-Term On-The-Job Training |
| 47-3019 | Helpers, Construction Trades, All Other | 170 | 210 | 40 | 23.5 | 70 | 11 | Short-Term On-The-Job Training |
| 47-4011 | Construction & Building Inspectors | 810 | 890 | 80 | 9.9 | 130 | 8 | Work Experience |
| 47-4021 | Elevator Installers & Repairers | 550 | 620 | 70 | 12.7 | 130 | 9 | Long-Term On-The-Job Training |
| 47-4031 | Fence Erectors | 170 | 190 | 20 | 11.8 | 20 | 10 | Moderate-Term On-The-Job Training |
| 47-4041 | Hazardous Materials Removal Workers | 640 | 730 | 90 | 14.1 | 140 | 10 | Moderate-Term On-The-Job Training |
| 47-4051 | Highway Maintenance Workers | 270 | 270 | 0 | 0.0 | 30 | 10 | Moderate-Term On-The-Job Training |
| 47-4099 | Construction & Related Workers, All Other | 580 | 700 | 120 | 20.7 | 170 | 10 | Moderate-Term On-The-Job Training |
| 47-5021 | Earth Drillers, Except Oil & Gas | 100 | 120 | 20 | 20.0 | 20 | | |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|--------|----------------------|---------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 49-0000 | Installation, Maintenance, & Repair Occupations | 30,270 | 32,260 | 1,990 | 6.6 | 4,540 | | |
| 49-1011 | First-Line Sups/Mgrs of Mechanics, Installers | 1,850 | 2,060 | 210 | 11.4 | 350 | 8 | Work Experience |
| 49-2011 | Computer, Automated Teller, & Office Mach Repairers | 3,630 | 3,940 | 310 | 8.5 | 280 | 7 | Post Secondary Vocational Education |
| 49-2022 | Telecomm Equip Install & Repair, Ex Line Installers | 1,440 | 1,390 | -50 | -3.5 | 180 | 7 | Post Secondary Vocational Education |
| 49-2092 | Electric Motor, Power Tool, & Related Repairers | 130 | 130 | 0 | 0.0 | 20 | 7 | Post Secondary Vocational Education |
| 49-2093 | Electrical & Electronics Install & Repair, Trans Equipment | 100 | 110 | 10 | 10.0 | 10 | 7 | Post Secondary Vocational Education |
| 49-2094 | Electrical & Electronics Repair, Comm & Industrial | 370 | 420 | 50 | 13.5 | 60 | 7 | Post Secondary Vocational Education |
| 49-2097 | Electronic Home Entertainment Equip Install & Repairers | 110 | 90 | -20 | -18.2 | 10 | 7 | Post Secondary Vocational Education |
| 49-2098 | Security & Fire Alarm Systems Installers | 250 | 290 | 40 | 16.0 | 40 | 7 | Post Secondary Vocational Education |
| 49-2099 | Electrical & Electronic Equip Mechs, Installers | 110 | 120 | 10 | 9.1 | 20 | 7 | Post Secondary Vocational Education |
| 49-3011 | Aircraft Mechanics & Service Technicians | 530 | 520 | -10 | -1.9 | 80 | 7 | Post Secondary Vocational Education |
| 49-3021 | Automotive Body & Related Repairers | 560 | 600 | 40 | 7.1 | 100 | 9 | Long-Term On-The-Job Training |
| 49-3023 | Automotive Service Technicians & Mechanics | 6,150 | 6,740 | 590 | 9.6 | 1,060 | 7 | Post Secondary Vocational Education |
| 49-3031 | Bus & Truck Mechs & Diesel Engine Specialists | 1,140 | 1,230 | 90 | 7.9 | 210 | 7 | Post Secondary Vocational Education |
| 49-3042 | Mobile Heavy Equip Mechanics, Except Engines | 1,050 | 1,190 | 140 | 13.3 | 200 | 7 | Post Secondary Vocational Education |
| 49-3053 | Tire Repairers & Changers | 280 | 280 | 0 | 0.0 | 80 | 11 | Short-Term On-The-Job Training |
| 49-9011 | Mechanical Door Repairers | 100 | 120 | 20 | 20.0 | 30 | 10 | Moderate-Term On-The-Job Training |
| 49-9012 | Control & Valve Installers & Repairers, Ex Mechanics | 150 | 180 | 30 | 20.0 | 40 | 10 | Moderate-Term On-The-Job Training |
| 49-9021 | Heating, Air Conditioning, & Refrigeration Mechanics | 1,140 | 1,400 | 260 | 22.8 | 90 | 9 | Long-Term On-The-Job Training |
| 49-9031 | Home Appliance Repairers | 170 | 180 | 10 | 5.9 | 20 | 9 | Long-Term On-The-Job Training |
| 49-9041 | Industrial Machinery Mechanics | 620 | 690 | 70 | 11.3 | 120 | 9 | Long-Term On-The-Job Training |
| 49-9042 | Maintenance & Repair Workers, General | 5,460 | 5,720 | 260 | 4.8 | 500 | 9 | Long-Term On-The-Job Training |
| 49-9043 | Maintenance Workers, Machinery | 440 | 470 | 30 | 6.8 | 90 | 9 | Long-Term On-The-Job Training |
| 49-9044 | Millwrights | 190 | 220 | 30 | 15.8 | 40 | 9 | Long-Term On-The-Job Training |
| 49-9052 | Telecommunications Line Installers & Repairers | 340 | 420 | 80 | 23.5 | 50 | 9 | Long-Term On-The-Job Training |
| 49-9062 | Medical Equipment Repairers | 120 | 140 | 20 | 16.7 | 20 | 10 | Moderate-Term On-The-Job Training |
| 49-9091 | Coin, Vend, & Amusement Mach Servicers & Repairers | 290 | 320 | 30 | 10.3 | 50 | 10 | Moderate-Term On-The-Job Training |
| 49-9094 | Locksmiths & Safe Repairers | 160 | 150 | -10 | -6.3 | 40 | 10 | Moderate-Term On-The-Job Training |
| 49-9096 | Riggers | 250 | 300 | 50 | 20.0 | 40 | 11 | Short-Term On-The-Job Training |
| 49-9098 | Helpers—Installation, Maint, & Repair Workers | 740 | 800 | 60 | 8.1 | 270 | 11 | Short-Term On-The-Job Training |
| 49-9099 | Installation, Maint, & Repair Workers, All Other | 2,400 | 2,040 | -360 | -15.0 | 440 | 9 | Long-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|--------|----------------------|---------|-----------------------------------|--------------------------|-----------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 51-0000 | Production Occupations | 62,040 | 66,470 | 4,430 | 7.1 | 10,040 | | |
| 51-1011 | First-Line Sups/Mgrs of Prod & Operating Wrks | 4,140 | 4,360 | 220 | 5.3 | 780 | 8 | Work Experience |
| 51-2021 | Coil Winders, Tapers, & Finishers | 100 | 110 | 10 | 10.0 | 20 | 11 | Short-Term On-The-Job Training |
| 51-2022 | Electrical & Electronic Equipment Assemblers | 3,470 | 3,230 | -240 | -6.9 | 600 | 11 | Short-Term On-The-Job Training |
| 51-2023 | Electromechanical Equipment Assemblers | 700 | 740 | 40 | 5.7 | 130 | 11 | Short-Term On-The-Job Training |
| 51-2031 | Engine & Other Machine Assemblers | 270 | 270 | 0 | 0.0 | 40 | 11 | Short-Term On-The-Job Training |
| 51-2041 | Structural Metal Fabricators & Fitters | 700 | 800 | 100 | 14.3 | 80 | 10 | Moderate-Term On-The-Job Training |
| 51-2091 | Fiberglass Laminators & Fabricators | 100 | 110 | 10 | 10.0 | 10 | 10 | Moderate-Term On-The-Job Training |
| 51-2092 | Team Assemblers | 7,860 | 8,390 | 530 | 6.7 | 980 | 10 | Moderate-Term On-The-Job Training |
| 51-2093 | Timing Device Assemblers, Adjusters, & Calibrators | 150 | 140 | -10 | -6.7 | 20 | 10 | Moderate-Term On-The-Job Training |
| 51-2099 | Assemblers & Fabricators, All Other | 1,840 | 2,000 | 160 | 8.7 | 230 | 10 | Moderate-Term On-The-Job Training |
| 51-3011 | Bakers | 1,680 | 1,970 | 290 | 17.3 | 200 | 9 | Long-Term On-The-Job Training |
| 51-3021 | Butchers & Meat Cutters | 1,430 | 1,450 | 20 | 1.4 | 250 | 9 | Long-Term On-The-Job Training |
| 51-3022 | Meat, Poultry, & Fish Cutters & Trimmers | 240 | 230 | -10 | -4.2 | 40 | 11 | Short-Term On-The-Job Training |
| 51-3091 | Food & Tobac Roast, Bake, & Dry Mach Ops & Tenders | 190 | 200 | 10 | 5.3 | 30 | 11 | Short-Term On-The-Job Training |
| 51-3092 | Food Batchmakers | 340 | 370 | 30 | 8.8 | 60 | 11 | Short-Term On-The-Job Training |
| 51-3093 | Food Cooking Machine Operators & Tenders | 210 | 240 | 30 | 14.3 | 30 | 11 | Short-Term On-The-Job Training |
| 51-4011 | Comp-Controlled Mach Tool Ops, Metal & Plastic | 710 | 790 | 80 | 11.3 | 190 | 9 | Long-Term On-The-Job Training |
| 51-4012 | Numerical Tool & Process Control Programmers | 150 | 170 | 20 | 13.3 | 40 | 9 | Long-Term On-The-Job Training |
| 51-4021 | Extrud & Draw Mach Setters, Ops, & Tends, Metl | 280 | 310 | 30 | 10.7 | 50 | 10 | Moderate-Term On-The-Job Training |
| 51-4022 | Forging Mach Setters, Ops, & Tends, Metal & Plastic | 140 | 150 | 10 | 7.1 | 30 | 10 | Moderate-Term On-The-Job Training |
| 51-4031 | Cutting, Punching, & Press Machine Setters, Ops | 1,110 | 1,110 | 0 | 0.0 | 150 | 10 | Moderate-Term On-The-Job Training |
| 51-4032 | Drill & Bore Mach Tool Set, Ops, & Tend, Metal | 220 | 210 | -10 | -4.5 | 50 | 10 | Moderate-Term On-The-Job Training |
| 51-4033 | Grind, Lap, Polish, & Buff Mach Tool Set, Ops, & Tend | 670 | 700 | 30 | 4.5 | 120 | 10 | Moderate-Term On-The-Job Training |
| 51-4034 | Lathe & Turn Mach Tool Set, Ops, & Tend, Metl & Plastic | 220 | 210 | -10 | -4.5 | 60 | 10 | Moderate-Term On-The-Job Training |
| 51-4035 | Mill & Plan Mach Set, Ops, & Tend, Metal & Plastic | 200 | 210 | 10 | 5.0 | 50 | 10 | Moderate-Term On-The-Job Training |
| 51-4041 | Machinists | 2,380 | 2,570 | 190 | 8.0 | 350 | 9 | Long-Term On-The-Job Training |
| 51-4051 | Metal-Refining Furnace Operators & Tenders | 100 | 110 | 10 | 10.0 | 20 | 10 | Moderate-Term On-The-Job Training |
| 51-4071 | Foundry Mold & Coremakers | 140 | 130 | -10 | -7.1 | 20 | 10 | Moderate-Term On-The-Job Training |
| 51-4072 | Mold, Core, & Cast Mach, Set, Ops & Tend, Metl & Plastic | 810 | 900 | 90 | 11.1 | 120 | 10 | Moderate-Term On-The-Job Training |
| 51-4081 | Mult Mach Tool Set, Ops, & Tend, Metal & Plastic | 500 | 580 | 80 | 16.0 | 60 | 10 | Moderate-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|---|------------------------------|-------|----------------------|---------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 51-4111 | Tool & Die Makers | 310 | 330 | 20 | 6.5 | 60 | 9 | Long-Term On-The-Job Training |
| 51-4121 | Welders, Cutters, Solderers, & Brazers | 2,360 | 2,760 | 400 | 16.9 | 500 | 7 | Post Secondary Vocational Education |
| 51-4122 | Weld, Solder, & Braze Mach Setters, Ops, & Tenders | 280 | 320 | 40 | 14.3 | 60 | 10 | Moderate-Term On-The-Job Training |
| 51-4193 | Plate & Coat Mach Set, Ops, & Tend, Metal & Plastic | 200 | 190 | -10 | -5.0 | 30 | 10 | Moderate-Term On-The-Job Training |
| 51-4199 | Metal Workers & Plastic Workers, All Other | 830 | 890 | 60 | 7.2 | 140 | 10 | Moderate-Term On-The-Job Training |
| 51-5011 | Bindery Workers | 270 | 280 | 10 | 3.7 | 50 | 10 | Moderate-Term On-The-Job Training |
| 51-5021 | Job Printers | 820 | 890 | 70 | 8.5 | 150 | 9 | Long-Term On-The-Job Training |
| 51-5022 | Prepress Technicians & Workers | 390 | 350 | -40 | -10.3 | 60 | 9 | Long-Term On-The-Job Training |
| 51-5023 | Printing Machine Operators | 910 | 960 | 50 | 5.5 | 160 | 10 | Moderate-Term On-The-Job Training |
| 51-6011 | Laundry & Dry-Cleaning Workers | 1,220 | 1,380 | 160 | 13.1 | 240 | 10 | Moderate-Term On-The-Job Training |
| 51-6021 | Pressers, Textile, Garment, & Related Materials | 470 | 520 | 50 | 10.6 | 50 | 11 | Short-Term On-The-Job Training |
| 51-6031 | Sewing Machine Operators | 1,790 | 1,870 | 80 | 4.5 | 130 | 10 | Moderate-Term On-The-Job Training |
| 51-6052 | Tailors, Dressmakers, & Custom Sewers | 400 | 420 | 20 | 5.0 | 60 | 8 | Work Experience |
| 51-6063 | Textile Knit & Weave Mach Setters, Ops & Tender | 110 | 120 | 10 | 9.1 | 10 | 9 | Long-Term On-The-Job Training |
| 51-6093 | Upholsterers | 140 | 110 | -30 | -21.4 | 30 | 9 | Long-Term On-The-Job Training |
| 51-6099 | Textile, Apparel, & Furnishings Workers, All Other | 390 | 460 | 70 | 17.9 | 70 | 10 | Moderate-Term On-The-Job Training |
| 51-7011 | Cabinetmakers & Bench Carpenters | 530 | 590 | 60 | 11.3 | 120 | 9 | Long-Term On-The-Job Training |
| 51-7021 | Furniture Finishers | 200 | 220 | 20 | 10.0 | 60 | 9 | Long-Term On-The-Job Training |
| 51-7042 | Woodwork Mach Setters, Ops, & Tenders, Ex Sawing | 190 | 190 | 0 | 0.0 | 60 | 10 | Moderate-Term On-The-Job Training |
| 51-7099 | Woodworkers, All Other | 130 | 140 | 10 | 7.7 | 40 | 10 | Long-Term On-The-Job Training |
| 51-8013 | Power Plant Operators | 140 | 150 | 10 | 7.1 | 30 | 9 | Long-Term On-The-Job Training |
| 51-8021 | Stationary Engineers & Boiler Operators | 390 | 410 | 20 | 5.1 | 80 | 9 | Long-Term On-The-Job Training |
| 51-8031 | Water & Liquid Waste Treat Plant & System Ops | 500 | 550 | 50 | 10.0 | 120 | 9 | Long-Term On-The-Job Training |
| 51-8091 | Chemical Plant & System Operators | 130 | 150 | 20 | 15.4 | 30 | 9 | Long-Term On-The-Job Training |
| 51-8099 | Plant & System Operators, All Other | 240 | 280 | 40 | 16.7 | 50 | 9 | Long-Term On-The-Job Training |
| 51-9011 | Chemical Equipment Operators & Tenders | 360 | 440 | 80 | 22.2 | 70 | 10 | Moderate-Term On-The-Job Training |
| 51-9012 | Separate, Filter, Clarify, Precipitate, & Still Machine Setters | 200 | 220 | 20 | 10.0 | 40 | 10 | Moderate-Term On-The-Job Training |
| 51-9021 | Crushing, Grinding, & Polishing Mach Setters, Ops, & Ten | 180 | 200 | 20 | 11.1 | 30 | 10 | Moderate-Term On-The-Job Training |
| 51-9022 | Grinding & Polishing Workers, Hand | 430 | 470 | 40 | 9.3 | 70 | 10 | Moderate-Term On-The-Job Training |
| 51-9023 | Mix & Blend Mach Setters, Ops, & Tenders | 720 | 840 | 120 | 16.7 | 120 | 10 | Moderate-Term On-The-Job Training |
| 51-9031 | Cutters & Trimmers, Hand | 150 | 150 | 0 | 0.0 | 20 | 11 | Short-Term On-The-Job Training |
| 51-9032 | Cutting & Slicing Mach Setters, Ops, & Tenders | 310 | 340 | 30 | 9.7 | 40 | 10 | Moderate-Term On-The-Job Training |
| 51-9041 | Extrude, Form, Press, & Compact Mach Set, Ops, & Ten | 410 | 490 | 80 | 19.5 | 70 | 10 | Moderate-Term On-The-Job Training |
| 51-9061 | Inspectors, Testers, Sorters, Samplers, & Weighers | 3,590 | 3,500 | -90 | -2.5 | 550 | 10 | Moderate-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|---|---|------------------------------|---------------|----------------------|------------|-----------------------------------|--------------------------|-----------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 51-9081 | Dental Laboratory Technicians | 660 | 730 | 70 | 10.6 | 130 | 9 | Long-Term On-The-Job Training |
| 51-9083 | Ophthalmic Laboratory Technicians | 140 | 140 | 0 | 0.0 | 30 | 10 | Moderate-Term On-The-Job Training |
| 51-9111 | Packaging & Filling Machine Operators & Tenders | 3,060 | 3,530 | 470 | 15.4 | 510 | 11 | Short-Term On-The-Job Training |
| 51-9121 | Coat, Paint, & Spray Mach Set, Ops & Tenders | 310 | 330 | 20 | 6.5 | 50 | 10 | Moderate-Term On-The-Job Training |
| 51-9122 | Painters, Transportation Equipment | 630 | 750 | 120 | 19.0 | 110 | 10 | Moderate-Term On-The-Job Training |
| 51-9131 | Photographic Process Workers | 110 | 100 | -10 | -9.1 | 20 | 10 | Moderate-Term On-The-Job Training |
| 51-9132 | Photographic Processing Machine Operators | 140 | 150 | 10 | 7.1 | 30 | 11 | Short-Term On-The-Job Training |
| 51-9141 | Semiconductor Processors | 900 | 960 | 60 | 6.7 | 110 | 6 | Associate Degree |
| 51-9191 | Cementing & Gluing Machine Operators & Tenders | 130 | 140 | 10 | 7.7 | 20 | 10 | Moderate-Term On-The-Job Training |
| 51-9195 | Molders, Shapers, & Casters, Except Metal & Plastic | 190 | 220 | 30 | 15.8 | 40 | 10 | Moderate-Term On-The-Job Training |
| 51-9196 | Paper Goods Machine Setters, Ops, & Tenders | 580 | 630 | 50 | 8.6 | 80 | 10 | Moderate-Term On-The-Job Training |
| 51-9198 | Helpers—Production Workers | 1,670 | 1,810 | 140 | 8.4 | 310 | 11 | Short-Term On-The-Job Training |
| 51-9199 | Production Workers, All Other | 2,780 | 3,040 | 260 | 9.4 | 390 | 10 | Moderate-Term On-The-Job Training |
| 53-0000 Transportation & Material Moving Occupations | | 58,500 | 64,320 | 5,820 | 9.9 | 10,350 | | |
| 53-1021 | First-Line Sups/Mgrs of Help, Labor, & Mat Movers | 840 | 930 | 90 | 10.7 | 130 | 8 | Work Experience |
| 53-1031 | First-Line Sups/Mgrs of Trans & Mat-Moving Machine | 1,290 | 1,460 | 170 | 13.2 | 200 | 8 | Work Experience |
| 53-2011 | Airline Pilots, Copilots, & Flight Engineers | 660 | 710 | 50 | 7.6 | 110 | 5 | Bachelor's Degree |
| 53-2021 | Air Traffic Controllers | 560 | 610 | 50 | 8.9 | 170 | 9 | Long-Term On-The-Job Training |
| 53-2022 | Airfield Operations Specialists | 150 | 170 | 20 | 13.3 | 50 | 11 | Short-Term On-The-Job Training |
| 53-3011 | Ambulance Drivers & Attendants, Ex EMTs | 180 | 190 | 10 | 5.6 | 10 | 10 | Moderate-Term On-The-Job Training |
| 53-3021 | Bus Drivers, Transit & Intercity | 2,480 | 2,670 | 190 | 7.7 | 460 | 10 | Moderate-Term On-The-Job Training |
| 53-3022 | Bus Drivers, School | 1,000 | 1,040 | 40 | 4.0 | 180 | 11 | Short-Term On-The-Job Training |
| 53-3031 | Driver/Sales Workers | 2,890 | 3,090 | 200 | 6.9 | 280 | 11 | Short-Term On-The-Job Training |
| 53-3032 | Truck Drivers, Heavy & Tractor-Trailer | 7,520 | 8,590 | 1,070 | 14.2 | 760 | 10 | Moderate-Term On-The-Job Training |
| 53-3033 | Truck Drivers, Light or Delivery Services | 7,330 | 8,400 | 1,070 | 14.6 | 740 | 11 | Short-Term On-The-Job Training |
| 53-3041 | Taxi Drivers & Chauffeurs | 510 | 540 | 30 | 5.9 | 30 | 11 | Short-Term On-The-Job Training |
| 53-3099 | Motor Vehicle Operators, All Other | 630 | 670 | 40 | 6.3 | 80 | 11 | Short-Term On-The-Job Training |

Table 6: Occupational Employment Projections^{1,2}
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Employment Change | | Openings Due to Separations | BLS Training Level | Education/Experience |
|-------------|--|------------------------------|--------|----------------------|---------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ³ | 2008 | Number | Percent | | | |
| 53-4011 | Locomotive Engineers | 140 | 180 | 40 | 28.6 | 20 | 8 | Work Experience |
| 53-4031 | Railroad Conductors & Yardmasters | 180 | 190 | 10 | 5.6 | 60 | 8 | Work Experience |
| 53-5011 | Sailors & Marine Oilers | 210 | 230 | 20 | 9.5 | 50 | 11 | Short-Term On-The-Job Training |
| 53-5021 | Captains, Mates, & Pilots of Water Vessels | 220 | 250 | 30 | 13.6 | 60 | 8 | Work Experience |
| 53-5031 | Ship Engineers | 140 | 160 | 20 | 14.3 | 40 | 7 | Post Secondary Vocational Education |
| 53-6021 | Parking Lot Attendants | 680 | 740 | 60 | 8.8 | 80 | 11 | Short-Term On-The-Job Training |
| 53-6031 | Service Station Attendants | 300 | 290 | -10 | -3.3 | 110 | 11 | Short-Term On-The-Job Training |
| 53-6099 | Transportation Workers, All Other | 1,230 | 1,310 | 80 | 6.5 | 320 | 11 | Short-Term On-The-Job Training |
| 53-7011 | Conveyor Operators & Tenders | 800 | 970 | 170 | 21.2 | 180 | 11 | Short-Term On-The-Job Training |
| 53-7021 | Crane & Tower Operators | 350 | 400 | 50 | 14.3 | 80 | 10 | Moderate-Term On-The-Job Training |
| 53-7032 | Excavating & Loading Machine & Dragline Operators | 100 | 120 | 20 | 20.0 | 20 | 10 | Moderate-Term On-The-Job Training |
| 53-7041 | Hoist & Winch Operators | 160 | 180 | 20 | 12.5 | 20 | 10 | Moderate-Term On-The-Job Training |
| 53-7051 | Industrial Truck & Tractor Operators | 4,050 | 4,350 | 300 | 7.4 | 400 | 11 | Short-Term On-The-Job Training |
| 53-7061 | Cleaners of Vehicles & Equipment | 1,670 | 1,740 | 70 | 4.2 | 460 | 11 | Short-Term On-The-Job Training |
| 53-7062 | Laborers & Freight, Stock, & Material Movers, Hand | 13,210 | 14,390 | 1,180 | 8.9 | 3,320 | 11 | Short-Term On-The-Job Training |
| 53-7063 | Machine Feeders & Offbearers | 1,040 | 990 | -50 | -4.8 | 250 | 11 | Short-Term On-The-Job Training |
| 53-7064 | Packers & Packagers, Hand | 5,940 | 6,690 | 750 | 12.6 | 1,130 | 11 | Short-Term On-The-Job Training |
| 53-7081 | Refuse & Recyclable Material Collectors | 920 | 920 | 0 | 0.0 | 290 | 11 | Short-Term On-The-Job Training |
| 53-7121 | Tank Car, Truck, & Ship Loaders | 290 | 210 | -80 | -27.6 | 50 | 10 | Moderate-Term On-The-Job Training |
| 53-7199 | Material Moving Workers, All Other | 830 | 940 | 110 | 13.3 | 210 | 11 | Short-Term On-The-Job Training |
| 99-9999 | Occupation Unknown | 510 | 470 | -40 | -7.8 | 60 | | |

¹Employment and projections contained in these tables are considered estimates. See introduction for an explanation of data limitations.

²Subtotals may not add to the county totals due to the rounding and the suppression of data. Some data are suppressed because of confidentiality, excessive standard error, or other issues.

³March 2001 Benchmark.

*This occupation is a summary occupation. There are no separations currently available for this SOC code. It is anticipated that in the future, this category will be broken out into more detailed occupations.

Table 7: Occupations with the Most Job Openings¹
(Growth plus Separations)
2001 – 2008
Alameda County

| SOC Code | Occupation | Number of Job Openings | BLS Training Level | Education/Experience |
|----------|--|------------------------|--------------------|---------------------------------------|
| 41-2031 | Retail Salespersons | 8110 | 11 | Short-Term On-The-Job Training |
| 35-3021 | Comb Food Prep & Serving Wrkrs, Incl Fast Food | 7910 | 11 | Short-Term On-The-Job Training |
| 41-2011 | Cashiers | 7680 | 11 | Short-Term On-The-Job Training |
| 53-7062 | Laborers & Freight, Stock, & Material Movers, Hand | 4500 | 11 | Short-Term On-The-Job Training |
| 43-9061 | Office Clerks, General | 3970 | 11 | Short-Term On-The-Job Training |
| 35-3031 | Waiters & Waitresses | 3830 | 11 | Short-Term On-The-Job Training |
| 29-1111 | Registered Nurses | 3190 | 6 | Associate Degree |
| 11-1021 | General & Operations Managers | 2860 | 4 | Bachelor's Or Higher & Some Work Exp. |
| 43-5081 | Stock Clerks & Order Fillers | 2850 | 11 | Short-Term On-The-Job Training |
| 41-4012 | Sales Reps, Wholesale & Mfg, Ex Tech & Scientific Products | 2830 | 10 | Moderate-Term On-The-Job Training |
| 43-4051 | Customer Service Representatives | 2420 | 10 | Moderate-Term On-The-Job Training |
| 33-9032 | Security Guards | 2080 | 11 | Short-Term On-The-Job Training |
| 35-2021 | Food Preparation Workers | 2070 | 11 | Short-Term On-The-Job Training |
| 47-2031 | Carpenters | 1950 | 9 | Long-Term On-The-Job Training |
| 53-7064 | Packers & Packagers, Hand | 1880 | 11 | Short-Term On-The-Job Training |
| 53-3032 | Truck Drivers, Heavy & Tractor-Trailer | 1830 | 10 | Moderate-Term On-The-Job Training |
| 53-3033 | Truck Drivers, Light or Delivery | 1810 | 11 | Short-Term On-The-Job Training |
| 37-2011 | Janitors & Clean, Ex Maids & Housekeep Cleaners | 1730 | 11 | Short-Term On-The-Job Training |
| 31-1012 | Nursing Aides, Orderlies, & Attendants | 1700 | 11 | Short-Term On-The-Job Training |
| 15-1031 | Computer Software Engineers, Applications | 1690 | 5 | Bachelor's Degree |
| 49-3023 | Automotive Service Technicians | 1650 | 7 | Post-Secondary Vocational Education |
| 43-4171 | Receptionists & Information Clerks | 1600 | 11 | Short-Term On-The-Job Training |
| 47-2061 | Construction Laborers | 1580 | 10 | Moderate-Term On-The-Job Training |
| 43-1011 | First-Line Sups/Mgrs of Office & Admin Support Wrkrs | 1570 | 8 | Work Experience |
| 43-6011 | Executive Secretaries & Administrative Assistants | 1560 | 10 | Moderate-Term On-The-Job Training |
| 25-9041 | Teacher Assistants | 1530 | 11 | Short-Term On-The-Job Training |
| 25-2021 | Elementary School Teachers, Except Special Ed | 1530 | 5 | Bachelor's Degree |
| 51-2092 | Team Assemblers | 1510 | 10 | Moderate-Term On-The-Job Training |
| 35-3022 | Counter Attends, Cafe, Food Concess, & Coffee Shop | 1510 | 11 | Short-Term On-The-Job Training |
| 47-2111 | Electricians | 1490 | 9 | Long-Term On-The-Job Training |

Table 7: Occupations with the Most Job Openings¹
(Growth plus Separations)
2001 – 2008
Alameda County

| SOC Code | Occupation | Number of Job Openings | BLS Training Level | Education/Experience |
|-----------------------------------|---|------------------------|--------------------|---------------------------------------|
| 37-3011 | Landscaping & Groundskeeping Workers | 1400 | 11 | Short-Term On-The-Job Training |
| 41-1011 | First-Line Sups/Mgrs of Retail Sales Workers | 1400 | 8 | Work Experience |
| 43-3031 | Bookkeeping, Accounting, & Auditing Clerks | 1370 | 10 | Moderate-Term On-The-Job Training |
| 43-5071 | Shipping, Receiving, & Traffic Clerks | 1250 | 11 | Short-Term On-The-Job Training |
| 15-1041 | Computer Support Specialists | 1220 | 6 | Associate Degree |
| 13-2011 | Accountants & Auditors | 1200 | 5 | Bachelor's Degree |
| 25-1191 | Graduate Teaching Assistants | 1200 | 5 | Bachelor's Degree |
| 15-1051 | Computer Systems Analysts | 1190 | 5 | Bachelor's Degree |
| 41-2021 | Counter & Rental Clerks | 1180 | 11 | Short-Term On-The-Job Training |
| 15-1032 | Computer Software Engineers, Systems Software | 1120 | 5 | Bachelor's Degree |
| 35-2014 | Cooks, Restaurant | 1110 | 9 | Long-Term On-The-Job Training |
| 33-3051 | Police & Sheriff's Patrol Officers | 1080 | 9 | Long-Term On-The-Job Training |
| 31-9092 | Medical Assistants | 1060 | 10 | Moderate-Term On-The-Job Training |
| 43-6014 | Secretaries, Except Legal, Medical | 1060 | 10 | Moderate-Term On-The-Job Training |
| 35-3011 | Bartenders | 1060 | 11 | Short-Term On-The-Job Training |
| 11-2022 | Sales Managers | 1010 | 4 | Bachelor's Or Higher & Some Work Exp. |
| 37-2012 | Maids & Housekeeping Cleaners | 1000 | 11 | Short-Term On-The-Job Training |
| 51-1011 | First-Line Sups/Mgrs of Prod & Operating Wrks | 1000 | 8 | Work Experience |
| 51-9111 | Packaging & Filling Machine Operators & Tenders | 980 | 11 | Short-Term On-The-Job Training |
| 11-1011 | Chief Executives | 960 | 4 | Bachelor's Or Higher & Some Work Exp. |
| TOTAL OF THESE OCCUPATIONS | | | | 105,270 |

¹Excludes All Other categories.

Table 8: Occupations with Projected Job Loss¹
2001 – 2008
Alameda County

| SOC Code | Occupation | Annual Average Employment | | Number of Jobs Lost | Openings due to Separations | BLS Training Level | Education/Experience |
|-----------------------------------|---|------------------------------|---------------|---------------------------|-----------------------------------|--------------------------|-------------------------------------|
| | | 2001 ² | 2008 | | | | |
| 43-4151 | Order Clerks | 3330 | 2890 | -440 | 460 | 11 | Short-Term On-The-Job Training |
| 51-2022 | Electrical & Electronic Equipment Assemblers | 3470 | 3230 | -240 | 600 | 11 | Short-Term On-The-Job Training |
| 43-9011 | Computer Operators | 1050 | 880 | -170 | 120 | 10 | Moderate-Term On-The-Job Training |
| 43-2011 | Switchboard Operators, Including Answering Service | 1030 | 890 | -140 | 200 | 11 | Short-Term On-The-Job Training |
| 43-2021 | Telephone Operators | 500 | 360 | -140 | 90 | 11 | Short-Term On-The-Job Training |
| 43-9022 | Word Processors & Typists | 820 | 690 | -130 | 110 | 10 | Moderate-Term On-The-Job Training |
| 43-9041 | Insurance Claims & Policy Processing Clerks | 980 | 870 | -110 | 110 | 10 | Moderate-Term On-The-Job Training |
| 51-9061 | Inspectors, Testers, Sorters, Samplers, & Weighers | 3590 | 3500 | -90 | 550 | 10 | Moderate-Term On-The-Job Training |
| 43-9021 | Data Entry Keyers | 2050 | 1970 | -80 | 220 | 10 | Moderate-Term On-The-Job Training |
| 53-7121 | Tank Car, Truck, & Ship Loaders | 290 | 210 | -80 | 50 | 10 | Moderate-Term On-The-Job Training |
| 43-4061 | Eligibility Interviewers, Government Programs | 1110 | 1040 | -70 | 220 | 10 | Moderate-Term On-The-Job Training |
| 43-9071 | Office Machine Operators, Except Computer | 460 | 400 | -60 | 110 | 11 | Short-Term On-The-Job Training |
| 43-4131 | Loan Interviewers & Clerks | 490 | 430 | -60 | 20 | 11 | Short-Term On-The-Job Training |
| 53-7063 | Machine Feeders & Offbearers | 1040 | 990 | -50 | 250 | 11 | Short-Term On-The-Job Training |
| 49-2022 | Telecomm Equip Install & Repair, Ex Line Installers | 1440 | 1390 | -50 | 180 | 7 | Post-Secondary Vocational Education |
| 51-5022 | Press Technicians & Workers | 390 | 350 | -40 | 60 | 9 | Long-Term On-The-Job Training |
| 51-6093 | Upholsterers | 140 | 110 | -30 | 30 | 9 | Long-Term On-The-Job Training |
| 43-4011 | Brokerage Clerks | 210 | 180 | -30 | 20 | 10 | Moderate-Term On-The-Job Training |
| TOTAL OF THESE OCCUPATIONS | | 22,390 | 20,380 | -2,010 | 3,400 | | |

¹Excludes All Other categories.

²March 2001 Benchmark.

Appendix

Standard Industrial Classification

The Standard Industrial Classification (SIC) is a nationally standardized system for identifying and coding business establishments according to their industrial activity. An "establishment" is an economic unit, generally located at a single physical location, where business is conducted or where services or industrial operations are performed. The Standard Industrial Classification (SIC) Manual is the reference guide used to accurately apply and/or understand the classification coding system.

The SIC Manual's format separates industries into ten broad divisions, such as manufacturing and retail trade. Within those broad groupings are more specific two-digit codes, as well as more detailed three-digit and four-digit codes, that identify specific industries. Brief narratives describe the kinds of establishments contained in each classification category.

Suggestions for Users

The SIC Manual facilitates the collection, analysis and publication of information about business establishments. This standardized system is used throughout the United States to promote uniformity in the publications of private and governmental agencies. The Employment Development Department's field office personnel use the manual to assign SIC codes to employers to aid in providing services. Trade associations and private industry use the manual in reference books, such as the California Manufacturers Register.

The manual can help one to understand the composite industries summarized in publications. However, all public sector workers are usually grouped together into a category called "government", which includes federal, state and local government, and state and local education.

The U.S. Department of Labor, Occupational Safety and Health Administration provides SIC information on the Internet at:

www.osha.gov

The SIC Manual may be purchased from U.S. Government Bookstores, Bureau of Labor Statistics, or the Superintendent of Documents in Los Angeles or San Francisco. For information about purchasing this manual, contact:

U.S. Government Bookstore
Marathon Plaza, Room 141-S
303 2nd Street
San Francisco, CA 94107
Phone – (415) 512-2770
Fax – (415) 512-2776
<http://access.gpo.go>

Standard Occupational Classification (SOC)

The Standard Occupational Classification (SOC) 1998 System was developed in response to a growing need for a universal occupational classification system—a system which would allow government agencies and private industry to produce comparable data. The SOC system was designed to cover all occupations in which work is performed for pay or profit and will be used by all federal agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

Data collected by the 2000 Census of Population will be coded to the 1998 SOC; the Department of Labor's Occupational Information Network (O*NET), adheres to the 1998 SOC. In fact, all federal government agencies that collect occupational data are expected to adopt the 1998 SOC over the next few years.

General Characteristics of the Revised SOC

This system classifies workers at four levels of aggregation:

- major group
- minor group
- broad occupation
- detailed occupation

All workers are classified into one of over 820 occupations, according to their occupational definition. To facilitate classification, all occupations are clustered into one of 23 major groups. Within these major groups, there are 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupation(s) requiring similar job duties, skills, education, or experience.

The following example shows the hierarchical structure of the 1998 SOC:

19-0000 Life, physical, and social science occupations (*major group*)

19-000 Life scientists (*minor group*)

19-1020 Biological scientists
(*broad occupation*)

19-1021 Biochemists and biophysicists
(*detailed occupation*)

19-1022 Microbiologists
(*detailed occupation*)

19-1023 Zoologists and wildlife biologists
(*detailed occupation*)

19-1029 Biological scientists, all other
(*detailed occupation*)

Additional information, updated revision plans, and information on the implementation of the 1998 SOC are available at the Bureau of Labor Statistics (BLS) Internet site:

www.bls.gov/soc/socguide.htm

North American Industry Classification System (NAICS)

The United States has a new industry classification system. The North American Industry Classification System (NAICS) will soon replace the U.S. Standard Industrial Classification (SIC) system.

The first-ever North American Industry classification system, NAICS was developed by the U.S., Canada and Mexico to provide comparable statistics across countries. For the first time, government and business analysts will be able to directly compare industrial production statistics collected and published in the North American Free Trade Agreement countries.

NAICS will reshape the way we view our changing economy. It is a unique, all-new system for classifying business establishments. It is the first economic classification system to be constructed based on a single economic concept. Economic units that use like processes to produce goods or services are grouped together. This "production-oriented" system means that statistical agencies in the United States will produce data that can be used for:

- measuring productivity, unit labor costs, and the capital intensity of production;
- constructing input-output relationships and;
- estimating employment-output relationships and other such statistics that require that inputs and outputs be used together.

NAICS responds to increasing and serious criticism about the SIC. NAICS reflects the structure of today's economy in the United States, Canada and Mexico, including the emergence and growth of the service sector and new and advanced technologies. It is a flexible system that allows each country to recognize important industries below the level at which comparable data will be shown for all three countries.

NAICS-based statistics.

Advance statistics will appear in early 1999. A report in 2000 will show relationships between NAICS and SIC industries. Implementation by Federal agencies will be in phases. Some agency programs will convert to NAICS as early as 1999, others as late as 2004.

How is NAICS better?

NAICS will make economic statistics more useful. It will improve basic benchmark and current performance statistics, like manufacturers' shipments, retail sales, and service receipts. It will improve statistics by providing an all-new industry classification system that is more:

Relevant. NAICS identifies new industries, revises concepts, and reorganizes classifications so that industry-classified statistics highlight businesses that contribute most to our economy.

Consistent. NAICS classifies businesses into industries based on one principle instead of several; the principle that businesses using similar production processes are classified together.

Comparable. NAICS provides the first-ever comparability in North American industry classifications and economic statistics.

Flexible. NAICS classifications will be updated regularly to keep pace with changes in our economy; every 5 years, all three North American countries will review NAICS and make needed revisions.

How NAICS will affect the data you use.

Every sector of the economy has been restructured and redefined:

- A new *Information* sector combines communications, publishing, motion picture and sound recording, and online services, recognizing our information-based economy.
- *Manufacturing* is restructured to incorporate high-tech industries, with a new subsector devoted to computers and electronics.
- *Retail Trade* is redefined. In addition, eating and drinking places are transferred to the new *Accommodation and Food Services* sector.
- The difference between Retail and Wholesale is now based on how each store conducts business.

For example, many computer stores are reclassified from wholesale to retail.

- Nine new service sectors and 250 new service industries are recognized.

All new numbering system

Numeric codes for each NAICS classification are completely different from those of the SIC. The new numbering system underscores the “clean slate” approach taken in NAICS and allows its classification changes to be fully developed.

The new system provides five levels of classification (up from four in the SIC), detailed codes that have a maximum of six-digits (up from four in the SIC) and detailed classifications called “U.S. Industry” (instead of “Industry” in the SIC). These changes require new numbers, even for industries that continue without change.

For example, both NAICS and SIC include the detailed industry, “Passenger car rental.” However, in NAICS, it has code number 532111, and in the SIC, it was code number 7514. While all NAICS numeric codes are new, like the SIC, they are organized into multi-level hierarchical classification groups that build up from the detailed industry level.

The additional level of classification and expanded number of digits permit NAICS to account for the increased number of classifications, provide flexibility in structuring industry classification groups, and allow for country-based variations in classification detail.

A variety of resources are available to help users of business statistics understand and use NAICS. Additional information, answers to frequently asked questions, and updated agency implementation plans are available at the Census Bureau's Internet site:

www.census.gov/naics

Answers to classification and data program inquiries may also be addressed to industry experts at:

Phone: 1-888-75NAICS

Email: naics@census.gov

Projection Methods and Economic Assumptions

The employment projection process consists of two phases: first, projections for employment by industry are made using both historical data and current information about the economy. Next, the industry projections become a primary source used to project changes in occupational employment.

Changes in occupational employment over time result from two principal sources: industry growth and technological change. In developing occupational employment projections, both of these components must be addressed.

The following is a discussion of how industry and occupational projections are developed, beginning with a description of data sources and followed by a description of the steps involved.

Principal Data Sources

Employment by Industry The source of the official historical industry employment series used for industry projections for the state and each county is the Current Employment Statistics (CES) program. This is a Federal/State cooperative program that compiles monthly estimates of industry employment groupings for the state and each county. These monthly industry employment estimates are based primarily on employer sample surveys.

A second source used in industry forecasts is the Covered Employment and Wage Data, or ES-202 program. Essentially, this program extracts employment and wage information from quarterly tax returns filed by each California employer covered by unemployment insurance. Each employer has been assigned a specific industry and county code and these data are compiled to provide the 'actual' industry employment levels for each industry and county. These data are then used for benchmarking the monthly industry employment estimates made in the CES program. This is also a Federal/State cooperative program.

Employment by Occupation Occupational employment estimates are based on survey data collected through the Occupational Employment Statistics (OES) program. The OES survey is an annual mail survey of nonfarm employers conducted by EDD in cooperation with the U.S. Bureau of Labor

Statistics. The survey is based on a sample designed to represent the universe of employers in each state. In California, data are collected for over 800 occupations at the three-digit SIC level of detail. The survey samples approximately 110,000 business establishments over a three year period.

The Process

Industry Projections Industry projections are first developed at aggregated levels (industry groupings) for the state and each county based on the Current Employment Statistics employment series.

Second, these aggregated industry projections are then broken down into more industry specific detail using the ES-202 data. The industry specific projections then become the primary source from which occupational projections are developed by using industry staffing patterns data. The following steps outline the process:

- Approximately every two years, industry employment projections are produced for the nation by the Bureau of Labor Statistics.
- Industry projections are then developed for the state using input from the national forecast and the historical industry employment series for the state.
- County industry projections are then developed using input from the state forecast and the historical employment series for each county.
- State projections are developed for ten years from the base period and county projections are developed for seven years from the base period.
- State forecasts are reviewed by LMID industry analysts, California's Department of Finance, and academics.
- County forecasts are reviewed by local area consultants who provide up-to-date information regarding recent developments in each county not normally accounted for in the model.

Occupational Projections The distribution of industry employment by occupation is performed in three steps.

- OES survey responses are summarized by industry and matched with appropriate SIC in the area. (In cases where local OES responses are not available, statewide responses or another area's responses are substituted.)
- The survey data are adjusted to total to the annual average employment level for each industry. This results in estimates of employment by occupation within the three-digit SICs for the base year.
- Finally, base year staffing patterns are adjusted to account for projected shifts in occupational distributions due to technological changes.

These projected changes are derived from special studies conducted by the U.S. Bureau of Labor Statistics. Applying these changes to the base year staffing patterns results in staffing patterns by three-digit SIC for the projected year. Projected year staffing patterns are applied to the industry employment projections to produce occupational employment projections within three-digit SICs. Data by occupation are then summed to get the occupational estimates. The difference between the base year occupation estimates and the projected year projections represents the job growth resulting from industry growth and from technological change. (Change factors do not try to predict regulatory changes.)

Demand for workers is also created by openings that result when workers leave jobs to enter other occupations, retire, or leave the labor force for other reasons. These openings, termed *separations*, are important because, in most occupations, they exceed job openings resulting from employment growth. Even occupations that are projected to decline usually provide job openings due to separations. Separations are developed from separation rates compiled on a national basis every two years by the Bureau Of Labor Statistics.

Economic Assumptions

The industry and occupational projections in this report are based on the following assumptions:

- The institutional framework of the U.S. economy will not change radically.
- Recent technological and scientific trends will continue.
- The long-term employment patterns will continue in most industries.
- Federal, state, and local government agencies will continue to operate under budgetary constraints.
- No major events, such as war, will occur that will significantly alter the industrial structure of the economy, the occupational staffing patterns, or the rate of long-term growth.
- Population growth rates and age distributions will not differ significantly from Department of Finance projections presently available.
- Attitudes toward work, education, income, and leisure will not change significantly.

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Accountants & Auditors | 56 | 13-2011 |
| Actors | 283 | 27-2011 |
| Actuaries | 82 | 15-2011 |
| Admin Law Judges, Adjudicators, & Hearing Officers | 194 | 23-1021 |
| Administrative Services Managers | 11 | 11-3011 |
| Adult Literacy, Remedial Ed, & GED Teachers & | 252 | 25-3011 |
| Advertising & Promotions Managers | 7 | 11-2011 |
| Advertising Sales Agents | 485 | 41-3011 |
| Aerospace Engineering & Operations Technicians | 117 | 17-3021 |
| Aerospace Engineers | 95 | 17-2011 |
| Agents & Bus Mgrs of Artists, Performers & Athletes | 39 | 13-1011 |
| Agricultural & Food Science Technicians | 163 | 19-4011 |
| Agricultural & Food Scientists, All Other | 131 | 19-1019 |
| Agricultural Engineers | 96 | 17-2021 |
| Agricultural Equipment Operators | 564 | 45-2091 |
| Agricultural Inspectors | 561 | 45-2011 |
| Agricultural Sciences Teachers, Postsecondary | 209 | 25-1041 |
| Agricultural Workers, All Other | 568 | 45-2099 |
| Air Crew Members | 873 | 55-3011 |
| Air Crew Officers | 862 | 55-1011 |
| Air Traffic Controllers | 813 | 53-2021 |
| Air Transportation Workers, All Other | 815 | 53-2099 |
| Aircraft Cargo Handling Supervisors | 808 | 53-1011 |
| Aircraft Launch & Recovery Officers | 863 | 55-1012 |
| Aircraft Launch & Recovery Specialists | 874 | 55-3012 |
| Aircraft Mechanics & Service Technicians | 654 | 49-3011 |
| Aircraft Struct, Surfaces, Rigging, & Systems Assemb | 696 | 51-2011 |
| Airfield Operations Specialists | 814 | 53-2022 |
| Airline Pilots, Copilots, & Flight Engineers | 811 | 53-2011 |
| Ambulance Drivers & Attendants, Ex EMTs | 816 | 53-3011 |
| Amusement & Recreation Attendants | 451 | 39-3091 |
| Anesthesiologists | 323 | 29-1061 |
| Animal Breeders | 562 | 45-2021 |
| Animal Control Workers | 402 | 33-9011 |
| Animal Scientists | 128 | 19-1011 |
| Animal Trainers | 444 | 39-2011 |
| Announcers, All Other | 295 | 27-3019 |
| Anthropologists & Archeologists | 158 | 19-3091 |
| Anthropology & Archeology Teachers, Postsecond | 216 | 25-1061 |
| Appraisers & Assessors of Real Estate | 57 | 13-2021 |
| Arbitrators, Mediators, & Conciliators | 195 | 23-1022 |
| Architects, Except Landscape & Naval | 90 | 17-1011 |
| Architects, Surveyors, & Cartographers, All Other | 94 | 17-1099 |
| Architectural & Civil Drafters | 113 | 17-3011 |
| Architecture & Engineering Occupations | 89 | 17-0000 |
| Architecture Teachers, Postsecondary | 207 | 25-1031 |
| Archivists, Curators, & Museum Technicians | 256 | 25-4011 |
| Archivists, Curators, & Museum Techs, All Other | 259 | 25-4019 |
| Area, Ethnic, & Cultral Studies Teachrs, Postsecond | 217 | 25-1062 |
| Armored Assault Vehicle Crew Members | 875 | 55-3013 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Armored Assault Vehicle Officers | 864 | 55-1013 |
| Art & Design Workers, All Other | 282 | 27-1099 |
| Art Directors | 269 | 27-1011 |
| Art, Drama, & Music Teachers, Postsecondary | 231 | 25-1121 |
| Artillery & Missile Crew Members | 876 | 55-3014 |
| Artillery & Missile Officers | 865 | 55-1014 |
| Artists & Related Workers, All Other | 273 | 27-1019 |
| Arts, Design, Entertainment, Sports, & Media Occs | 268 | 27-0000 |
| Assemblers & Fabricators, All Other | 705 | 51-2099 |
| Astronomers | 141 | 19-2011 |
| Athletes & Sports Competitors | 285 | 27-2021 |
| Athletic Trainers | 366 | 29-9091 |
| Atmos, Earth, Marine, & Space Sciences Teachrs | 212 | 25-1051 |
| Atmospheric & Space Scientists | 143 | 19-2021 |
| Audio & Video Equipment Technicians | 305 | 27-4011 |
| Audiologists | 334 | 29-1121 |
| Audio-Visual Collections Specialists | 262 | 25-9011 |
| Automotive Body & Related Repairers | 655 | 49-3021 |
| Automotive Glass Installers & Repairers | 656 | 49-3022 |
| Automotive Service Technicians & Mechanics | 657 | 49-3023 |
| Avionics Technicians | 645 | 49-2091 |
| Baggage Porters & Bellhops | 464 | 39-6011 |
| Bailiffs | 395 | 33-3011 |
| Bakers | 706 | 51-3011 |
| Barbers | 458 | 39-5011 |
| Bartenders | 419 | 35-3011 |
| Bicycle Repairers | 665 | 49-3091 |
| Bill & Account Collectors | 505 | 43-3011 |
| Billing & Posting Clerks & Machine Operators | 506 | 43-3021 |
| Bindery Workers | 740 | 51-5011 |
| Biochemists & Biophysicists | 132 | 19-1021 |
| Biological Science Teachers, Postsecondary | 210 | 25-1042 |
| Biological Scientists, All Other | 135 | 19-1029 |
| Biological Technicians | 164 | 19-4021 |
| Biomedical Engineers | 97 | 17-2031 |
| Bldng & Grounds Cleaning & Maint Wrkers, All Other | 439 | 37-9099 |
| Boilermakers | 579 | 47-2011 |
| Bookbinders | 741 | 51-5012 |
| Bookkeeping, Accounting, & Auditing Clerks | 507 | 43-3031 |
| Brickmasons & Blockmasons | 580 | 47-2021 |
| Bridge & Lock Tenders | 836 | 53-6011 |
| Broadcast News Analysts | 296 | 27-3021 |
| Broadcast Technicians | 306 | 27-4012 |
| Brokerage Clerks | 512 | 43-4011 |
| Budget Analysts | 58 | 13-2031 |
| Building & Grounds Cleaning & Maintenance Occs | 428 | 37-0000 |
| Building Cleaning Workers, All Other | 433 | 37-2019 |
| Bus & Truck Mechs & Diesel Engine Specialists | 658 | 49-3031 |
| Bus Drivers, School | 818 | 53-3022 |
| Bus Drivers, Transit & Intercity | 817 | 53-3021 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Business & Financial Operations Occupations | 38 | 13-0000 |
| Business Operations Specialists, All Other | 55 | 13-1199 |
| Business Teachers, Postsecondary | 204 | 25-1011 |
| Butchers & Meat Cutters | 707 | 51-3021 |
| Cabinetmakers & Bench Carpenters | 761 | 51-7011 |
| Camera & Photographic Equipment Repairers | 680 | 49-9061 |
| Camera Ops, Television, Video, & Motion Picture | 310 | 27-4031 |
| Captains, Mates, & Pilots of Water Vessels | 832 | 53-5021 |
| Cardiovascular Technologists & Technicians | 347 | 29-2031 |
| Cargo & Freight Agents | 530 | 43-5011 |
| Carpenters | 582 | 47-2031 |
| Carpet Installers | 583 | 47-2041 |
| Cartographers & Photogrammetrists | 92 | 17-1021 |
| Cashiers | 480 | 41-2011 |
| Cement Masons & Concrete Finishers | 587 | 47-2051 |
| Cementing & Gluing Machine Operators & Tenders | 798 | 51-9191 |
| Chefs & Head Cooks | 410 | 35-1011 |
| Chemical Engineers | 98 | 17-2041 |
| Chemical Equipment Operators & Tenders | 777 | 51-9011 |
| Chemical Plant & System Operators | 773 | 51-8091 |
| Chemical Technicians | 165 | 19-4031 |
| Chemistry Teachers, Postsecondary | 213 | 25-1052 |
| Chemists | 144 | 19-2031 |
| Chief Executives | 4 | 11-1011 |
| Child Care Workers | 470 | 39-9011 |
| Child, Family, & School Social Workers | 180 | 21-1021 |
| Chiropractors | 314 | 29-1011 |
| Choreographers | 289 | 27-2032 |
| Civil Engineering Technicians | 118 | 17-3022 |
| Civil Engineers | 99 | 17-2051 |
| Claims Adjusters, Examiners, & Investigators | 43 | 13-1031 |
| Clean, Wash, & Metal Pickling Equip Ops & Tenders | 799 | 51-9192 |
| Cleaners of Vehicles & Equipment | 849 | 53-7061 |
| Clergy | 188 | 21-2011 |
| Clinical, Counseling, & School Psychologists | 153 | 19-3031 |
| Coaches & Scouts | 286 | 27-2022 |
| Coat, Paint, & Spray Mach Set, Opes & Tenders | 792 | 51-9121 |
| Coil Winders, Tapers, & Finishers | 697 | 51-2021 |
| Coin, Vend, & Amusement Mach Servicers & Repair | 685 | 49-9091 |
| Comb Food Prep & Serving Wrkers, Incl Fast Food | 420 | 35-3021 |
| Comm& & Control Center Officers | 866 | 55-1015 |
| Command & Control Center Specialists | 877 | 55-3015 |
| Commercial & Industrial Designers | 274 | 27-1021 |
| Commercial Divers | 686 | 49-9092 |
| Commercial Pilots | 812 | 53-2012 |
| Communications Equipment Operators, All Other | 504 | 43-2099 |
| Communications Teachers, Postsecondary | 232 | 25-1122 |
| Community & Social Service Specialists, All Other | 187 | 21-1099 |
| Community & Social Services Occupations | 173 | 21-0000 |
| Comp Officers, Ex Ag, Const, Hlth & Safety, & Trans | 45 | 13-1041 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Comp-Controlled Mach Tool Ops, Metal & Plastic | 714 | 51-4011 |
| Compensation & Benefits Managers | 14 | 11-3041 |
| Compensation, Benefits, & Job Analysis Specialists | 49 | 13-1072 |
| Computer & Information Scientists, Research | 72 | 15-1011 |
| Computer & Information Systems Managers | 12 | 11-3021 |
| Computer & Mathematical Science Occupations | 71 | 15-0000 |
| Computer Hardware Engineers | 100 | 17-2061 |
| Computer Operators | 546 | 43-9011 |
| Computer Programmers | 73 | 15-1021 |
| Computer Science Teachers, Postsecondary | 205 | 25-1021 |
| Computer Software Engineers, Applications | 74 | 15-1031 |
| Computer Software Engineers, Systems Software | 75 | 15-1032 |
| Computer Specialists, All Other | 81 | 15-1099 |
| Computer Support Specialists | 76 | 15-1041 |
| Computer Systems Analysts | 77 | 15-1051 |
| Computer, Automated Teller, & Office Mach Repairer | 642 | 49-2011 |
| Concierges | 465 | 39-6012 |
| Conservation Scientists | 136 | 19-1031 |
| Construction & Building Inspectors | 616 | 47-4011 |
| Construction & Extraction Occupations | 577 | 47-0000 |
| Construction & Extraction Occupations, All Other | 639 | 47-9999 |
| Construction & Related Workers, All Other | 624 | 47-4099 |
| Construction Laborers | 589 | 47-2061 |
| Construction Managers | 22 | 11-9021 |
| Construction Trades & Related Workers, All Other | 625 | 47-4999 |
| Continuous Mining Machine Operators | 631 | 47-5041 |
| Control & Valve Installers & Repairers, Ex Mech | 670 | 49-9012 |
| Conveyor Operators & Tenders | 842 | 53-7011 |
| Cooks, All Other | 417 | 35-2019 |
| Cooks, Fast Food | 412 | 35-2011 |
| Cooks, Institution & Cafeteria | 413 | 35-2012 |
| Cooks, Private Household | 414 | 35-2013 |
| Cooks, Restaurant | 415 | 35-2014 |
| Cooks, Short Order | 416 | 35-2015 |
| Cooling & Freezing Equipment Operators & Tenders | 800 | 51-9193 |
| Correctional Officers & Jailers | 396 | 33-3012 |
| Correspondence Clerks | 513 | 43-4021 |
| Cost Estimators | 46 | 13-1051 |
| Costume Attendants | 452 | 39-3092 |
| Counselors, All Other | 179 | 21-1019 |
| Counselors, Social & Religious Workers, All Other | 191 | 21-9099 |
| Counter & Rental Clerks | 482 | 41-2021 |
| Counter Attends, Cafe, Food Concess, & Coffee Shop | 421 | 35-3022 |
| Couriers & Messengers | 531 | 43-5021 |
| Court Reporters | 198 | 23-2091 |
| Court, Municipal, & License Clerks | 514 | 43-4031 |
| Craft Artists | 270 | 27-1012 |
| Crane & Tower Operators | 843 | 53-7021 |
| Credit Analysts | 59 | 13-2041 |
| Credit Authorizers, Checkers, & Clerks | 515 | 43-4041 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Criminal Justice & Law Enforce Teachrs, Postsecond | 228 | 25-1111 |
| Crossing Guards | 406 | 33-9091 |
| Crushing, Grinding, & Polishing Mach Setters, Ops | 779 | 51-9021 |
| Curators | 257 | 25-4012 |
| Customer Service Representatives | 516 | 43-4051 |
| Cutters & Trimmers, Hand | 782 | 51-9031 |
| Cutting & Slicing Mach Setters, Ops, & Tenders | 783 | 51-9032 |
| Cutting, Punching, & Press Machine Setters, Ops | 719 | 51-4031 |
| Dancers | 288 | 27-2031 |
| Data Entry Keyers | 547 | 43-9021 |
| Database Administrators | 78 | 15-1061 |
| Demonstrators & Product Promoters | 492 | 41-9011 |
| Dental Assistants | 380 | 31-9091 |
| Dental Hygienists | 346 | 29-2021 |
| Dental Laboratory Technicians | 788 | 51-9081 |
| Dentists, All Other Specialists | 319 | 29-1029 |
| Dentists, General | 315 | 29-1021 |
| Derrick Operators, Oil & Gas | 626 | 47-5011 |
| Designers, All Other | 281 | 27-1029 |
| Desktop Publishers | 549 | 43-9031 |
| Detectives & Criminal Investigators | 397 | 33-3021 |
| Diagnostic Medical Sonographers | 348 | 29-2032 |
| Dietetic Technicians | 352 | 29-2051 |
| Dietitians & Nutritionists | 320 | 29-1031 |
| Dining Rm & Cafeteria Attendants & Bartender Help | 424 | 35-9011 |
| Directors, Religious Activities & Education | 189 | 21-2021 |
| Dishwashers | 425 | 35-9021 |
| Dispatchers, Except Police, Fire, & Ambulance | 533 | 43-5032 |
| Drafters, All Other | 116 | 17-3019 |
| Drafters, Engineering, & Map Technicians, All Other | 126 | 17-3099 |
| Dredge Operators | 844 | 53-7031 |
| Drill & Bore Mach Tool Set, Ops, & Tend, Metal & Plasti | 720 | 51-4032 |
| Driver/Sales Workers | 819 | 53-3031 |
| Dr-to-Dr Sales Wrkrs, Nws & St Vndrs, & Rel Wrkrs | 498 | 41-9091 |
| Drywall & Ceiling Tile Installers | 593 | 47-2081 |
| Earth Drillers, Except Oil & Gas | 629 | 47-5021 |
| Economics Teachers, Postsecondary | 218 | 25-1063 |
| Economists | 150 | 19-3011 |
| Editors | 300 | 27-3041 |
| Educ Admins, Elementary & Secondary School | 24 | 11-9032 |
| Educ Admins, Preschool & Child Care Center | 23 | 11-9031 |
| Education Administrators, All Other | 26 | 11-9039 |
| Education Administrators, Postsecondary | 25 | 11-9033 |
| Education Teachers, Postsecondary | 226 | 25-1081 |
| Education, Training, & Library Occupations | 203 | 25-0000 |
| Education, Training, & Library Workers, All Other | 266 | 25-9099 |
| Educational, Vocational, & School Counselors | 175 | 21-1012 |
| Electric Motor, Power Tool, & Related Repairers | 646 | 49-2092 |
| Electrical & Electronic Engineering Technicians | 119 | 17-3023 |
| Electrical & Electronic Equipment Assemblers | 698 | 51-2022 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Electrical & Electronic Equip Mechs, Install, & Repair | 653 | 49-2099 |
| Electrical & Electronics Drafters | 114 | 17-3012 |
| Electrical & Electronics Install & Repair, Trans Equipt | 647 | 49-2093 |
| Electrical & Electronics Repair, Comm & Indust Equipt | 648 | 49-2094 |
| Electrical & Electronics Repair, Powerhse, Substrn, & Re | 649 | 49-2095 |
| Electrical Engineers | 101 | 17-2071 |
| Electrical Power-Line Installers & Repairers | 678 | 49-9051 |
| Electricians | 595 | 47-2111 |
| Electromechanical Equipment Assemblers | 699 | 51-2023 |
| Electro-Mechanical Technicians | 120 | 17-3024 |
| Electronic Equipt Install & Repair, Motor Veh | 650 | 49-2096 |
| Electronic Home Entertainment Equipt Install & Repair | 651 | 49-2097 |
| Electronics Engineers, Except Computer | 102 | 17-2072 |
| Elementary School Teachers, Except Special Ed | 244 | 25-2021 |
| Elevator Installers & Repairers | 617 | 47-4021 |
| Eligibility Interviewers, Government Programs | 517 | 43-4061 |
| Embalmers | 456 | 39-4011 |
| Emergency Management Specialists | 47 | 13-1061 |
| Emergency Medical Technicians & Paramedics | 351 | 29-2041 |
| Employment, Recruitment, & Placement Specialists | 48 | 13-1071 |
| Engine & Other Machine Assemblers | 700 | 51-2031 |
| Engineering Managers | 27 | 11-9041 |
| Engineering Teachers, Postsecondary | 208 | 25-1032 |
| Engineering Technicians, Except Drafters, All Other | 124 | 17-3029 |
| Engineers, All Other | 112 | 17-2199 |
| English Lang & Literature Teachers, Postsecond | 233 | 25-1123 |
| Entertainers & Performers, Sports & Rel Workers | 292 | 27-2099 |
| Entertainment Attendants & Rel Workers, All Other | 454 | 39-3099 |
| Environ Science & Protection Techs, Incl Health | 169 | 19-4091 |
| Environmental Engineering Technicians | 121 | 17-3025 |
| Environmental Engineers | 103 | 17-2081 |
| Environmental Science Teachers, Postsecondary | 214 | 25-1053 |
| Environmental Scientists & Specialists, Incl Health | 146 | 19-2041 |
| Epidemiologists | 138 | 19-1041 |
| Etchers & Engravers | 801 | 51-9194 |
| Excavating & Loading Machine & Dragline Operators | 845 | 53-7032 |
| Executive Secretaries & Administrative Assistants | 542 | 43-6011 |
| Explosive Wrkers, Ordnce Handling Experts, & Blasters | 630 | 47-5031 |
| Extraction Workers, All Other | 638 | 47-5099 |
| Extrud & Draw Mach Setters, Ops, & Tends, Metl & Plas | 716 | 51-4021 |
| Extrude & Form Mach Setters, Ops, & Tenders | 757 | 51-6091 |
| Extrude, Form, Press, & Compact Mach Set, Ops, & Tend | 784 | 51-9041 |
| Fabric & Apparel Patternmakers | 758 | 51-6092 |
| Fabric Menders, Except Garment | 687 | 49-9093 |
| Fallers | 572 | 45-4021 |
| Family & General Practitioners | 324 | 29-1062 |
| Farm & Home Management Advisors | 263 | 25-9021 |
| Farm Equipment Mechanics | 659 | 49-3041 |
| Farm Labor Contractors | 560 | 45-1012 |
| Farm, Ranch, & Other Agricultural Managers | 20 | 11-9011 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Farmers & Ranchers | 21 | 11-9012 |
| Farming, Fishing, & Forestry Occupations | 558 | 45-0000 |
| Farming, Fishing, & Forestry Workers, All Other | 576 | 45-9099 |
| Farmworkers, Agricultural Production | 567 | 45-2094 |
| Farmworkers, Farm & Ranch Animals | 566 | 45-2093 |
| Farmwrkrs & Labor, Crop, Nursery, & Greenhouse | 565 | 45-2092 |
| Fashion Designers | 275 | 27-1022 |
| Fence Erectors | 618 | 47-4031 |
| Fiberglass Laminators & Fabricators | 702 | 51-2091 |
| File Clerks | 518 | 43-4071 |
| Film & Video Editors | 311 | 27-4032 |
| Financial Analysts | 60 | 13-2051 |
| Financial Examiners | 63 | 13-2061 |
| Financial Managers | 13 | 11-3031 |
| Financial Specialists, All Other | 68 | 13-2099 |
| Financial, Information, & Record Clerks, All Other | 529 | 43-4999 |
| Fine Artists, Incl Painters, Sculptors, & Illustrators | 271 | 27-1013 |
| Fire Fighters | 392 | 33-2011 |
| Fire Inspectors & Investigators | 393 | 33-2021 |
| First-Line Supervisors/Managers of Air Crew Members | 870 | 55-2011 |
| First-Line Supervisors/Managers of All Other Tactical O | 872 | 55-2013 |
| First-Line Supervisors/Managers of Weapons Specialists | 871 | 55-2012 |
| First-Line Sups/Managers of Correctional Officers | 388 | 33-1011 |
| First-Line Sups/Managers of Police & Detectives | 389 | 33-1012 |
| First-Line Sups/Mgrs of Construction Trades | 578 | 47-1011 |
| First-Line Sups/Mgrs of Farm, Fish, & Forest Wrkrs | 559 | 45-1011 |
| First-Line Sups/Mgrs of Fire Fighting & Prevent Wrkrs | 390 | 33-1021 |
| First-Line Sups/Mgrs of Food Prep & Serving Wrkrs | 411 | 35-1012 |
| First-Line Sups/Mgrs of Help, Labor, & Mat Move, Hand | 809 | 53-1021 |
| First-Line Sups/Mgrs of Housekeep & Janitor Wrkrs | 429 | 37-1011 |
| First-Line Sups/Mgrs of Lndscp, Lwn Serv, & Grndskeep W | 430 | 37-1012 |
| First-Line Sups/Mgrs of Mechanics, Installer | 641 | 49-1011 |
| First-Line Sups/Mgrs of Non-Retail Sales Workers | 479 | 41-1012 |
| First-Line Sups/Mgrs of Office & Admin Support Wrkrs | 501 | 43-1011 |
| First-Line Sups/Mgrs of Personal Service Workers | 443 | 39-1021 |
| First-Line Sups/Mgrs of Prod & Operating Wrkrs | 695 | 51-1011 |
| First-Line Sups/Mgrs of Retail Sales Workers | 478 | 41-1011 |
| First-Line Sups/Mgrs of Trans & Mat-Moving Mach & Veh O | 810 | 53-1031 |
| First-Line Sups/Mgrs, Protective Serv Wrkrs, All Other | 391 | 33-1099 |
| Fish & Game Wardens | 398 | 33-3031 |
| Fishers & Related Fishing Workers | 569 | 45-3011 |
| Fitness Trainers & Aerobics Instructors | 472 | 39-9031 |
| Flight Attendants | 468 | 39-6031 |
| Floor Layers, Except Carpet, Wood, & Hard Tiles | 584 | 47-2042 |
| Floor Sanders & Finishers | 585 | 47-2043 |
| Floral Designers | 276 | 27-1023 |
| Food & Tobac Roast, Bake, & Dry Mach Ops & Tends | 710 | 51-3091 |
| Food Batchmakers | 711 | 51-3092 |
| Food Cooking Machine Operators & Tenders | 712 | 51-3093 |
| Food Prep & Serving Related Workers, All Other | 427 | 35-9099 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Food Preparation & Serving Related Occupations | 409 | 35-0000 |
| Food Preparation Workers | 418 | 35-2021 |
| Food Processing Workers, All Other | 713 | 51-3099 |
| Food Scientists & Technologists | 129 | 19-1012 |
| Food Servers, Nonrestaurant | 423 | 35-3041 |
| Food Service Managers | 28 | 11-9051 |
| Foreign Language & Lit Teachrs, Postsecond | 234 | 25-1124 |
| Forensic Science Technicians | 170 | 19-4092 |
| Forest & Conservation Science Teachrs, Postsecond | 211 | 25-1043 |
| Forest & Conservation Technicians | 171 | 19-4093 |
| Forest & Conservation Workers | 571 | 45-4011 |
| Forest Fire Inspectors & Prevention Specialists | 394 | 33-2022 |
| Foresters | 137 | 19-1032 |
| Forging Mach Setters, Ops, & Tends, Metal & Plastic | 717 | 51-4022 |
| Foundry Mold & Coremakers | 729 | 51-4071 |
| Funeral Attendants | 457 | 39-4021 |
| Funeral Directors | 29 | 11-9061 |
| Furnace, Kiln, Oven, Drier, & Kettle Ops & Tenders | 785 | 51-9051 |
| Furniture Finishers | 762 | 51-7021 |
| Gaming & Sports Book Writers & Runners | 447 | 39-3012 |
| Gaming Cage Workers | 508 | 43-3041 |
| Gaming Change Persons & Booth Cashiers | 481 | 41-2012 |
| Gaming Dealers | 446 | 39-3011 |
| Gaming Managers | 30 | 11-9071 |
| Gaming Service Workers, All Other | 448 | 39-3019 |
| Gaming Supervisors | 441 | 39-1011 |
| Gaming Surveillance Officers & Gaming Investigators | 404 | 33-9031 |
| Gaming Workers, All Other | 455 | 39-3199 |
| Gas Compressor & Gas Pumping Station Operators | 853 | 53-7071 |
| Gas Plant Operators | 774 | 51-8092 |
| General & Operations Managers | 5 | 11-1021 |
| Geographers | 159 | 19-3092 |
| Geography Teachers, Postsecondary | 219 | 25-1064 |
| Geological & Petroleum Technicians | 166 | 19-4041 |
| Geoscientists, Except Hydrologists & Geographers | 147 | 19-2042 |
| Glaziers | 596 | 47-2121 |
| Graders & Sorters, Agricultural Products | 563 | 45-2041 |
| Graduate Teaching Assistants | 237 | 25-1191 |
| Graphic Designers | 277 | 27-1024 |
| Grind, Lap, Polish, & Buff Mach Tool Set, Ops, & Tend, | 721 | 51-4033 |
| Grinding & Polishing Workers, Hand | 780 | 51-9022 |
| Grounds Maintenance Workers, All Other | 438 | 37-3019 |
| Hairdressers, Hairstylists, & Cosmetologists | 459 | 39-5012 |
| Hazardous Materials Removal Workers | 619 | 47-4041 |
| Health & Safety Engrs, Ex Mining Safety Engrs & Insp | 104 | 17-2111 |
| Health Diagnosing & Treating Practitioners, All Other | 343 | 29-1199 |
| Health Educators | 184 | 21-1091 |
| Health Professionals & Technicians, All Other | 368 | 29-9199 |
| Health Specialties Teachers, Postsecondary | 224 | 25-1071 |
| Health Technologists & Technicians, All Other | 362 | 29-2099 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Healthcare Practitioners & Tech Workers, All Other | 367 | 29-9099 |
| Healthcare Practitioners & Technical Occupations | 313 | 29-0000 |
| Healthcare Support Occupations | 371 | 31-0000 |
| Healthcare Support Workers, All Other | 386 | 31-9099 |
| Heat Treat Equipt Set, Ops, & Tend, Metal & Plastic | 735 | 51-4191 |
| Heating, Air Conditioning, & Refrigeration Mechanics | 671 | 49-9021 |
| Helpers, Construction Trades, All Other | 615 | 47-3019 |
| Helpers--Brick, Block, Stonemasons, & Tile & Marble Set | 609 | 47-3011 |
| Helpers--Carpenters | 610 | 47-3012 |
| Helpers--Electricians | 611 | 47-3013 |
| Helpers--Extraction Workers | 637 | 47-5081 |
| Helpers--Installation, Maint, & Repair Workers | 692 | 49-9098 |
| Helpers--Paint, Paperhanger, Plaster, & Stucco | 612 | 47-3014 |
| Helpers--Pipelayer, Plumber, Pipefitter, & Steamfitter | 613 | 47-3015 |
| Helpers--Production Workers | 805 | 51-9198 |
| Helpers--Roofers | 614 | 47-3016 |
| Highway Maintenance Workers | 620 | 47-4051 |
| Historians | 160 | 19-3093 |
| History Teachers, Postsecondary | 235 | 25-1125 |
| Hoist & Winch Operators | 847 | 53-7041 |
| Home Appliance Repairers | 672 | 49-9031 |
| Home Economics Teachers, Postsecondary | 238 | 25-1192 |
| Home Health Aides | 372 | 31-1011 |
| Hosts & Hostess, Restaurant, Lounge, & Coffee Shp | 426 | 35-9031 |
| Hotel, Motel, & Resort Desk Clerks | 519 | 43-4081 |
| Human Resources Assist, Ex Pay & Timekeep | 525 | 43-4161 |
| Human Resources Managers, All Other | 16 | 11-3049 |
| Human Resrces, Trng, & Lab Rels Specs, All Other | 51 | 13-1079 |
| Hunters & Trappers | 570 | 45-3021 |
| Hydrologists | 148 | 19-2043 |
| Industrial Engineering Technicians | 122 | 17-3026 |
| Industrial Engineers | 105 | 17-2112 |
| Industrial Machinery Mechanics | 673 | 49-9041 |
| Industrial Production Managers | 17 | 11-3051 |
| Industrial Truck & Tractor Operators | 848 | 53-7051 |
| Industrial-Organizational Psychologists | 154 | 19-3032 |
| Infantry | 878 | 55-3016 |
| Infantry Officers | 867 | 55-1016 |
| Information & Record Clerks, All Other | 528 | 43-4199 |
| Inspectors, Testers, Sorters, Samplers, & Weighers | 786 | 51-9061 |
| Installation, Maint, & Repair Workers, All Other | 693 | 49-9099 |
| Installation, Maintenance, & Repair Occupations | 640 | 49-0000 |
| Instructional Coordinators | 264 | 25-9031 |
| Insulation Workers, All Other | 599 | 47-2139 |
| Insulation Workers, Floor, Ceiling, & Wall | 597 | 47-2131 |
| Insulation Workers, Mechanical | 598 | 47-2132 |
| Insurance Appraisers, Auto Damage | 44 | 13-1032 |
| Insurance Claims & Policy Processing Clerks | 550 | 43-9041 |
| Insurance Sales Agents | 486 | 41-3021 |
| Insurance Underwriters | 62 | 13-2053 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Interior Designers | 278 | 27-1025 |
| Internists, General | 325 | 29-1063 |
| Interpreters & Translators | 303 | 27-3091 |
| Interviewers, Except Eligibility & Loan | 520 | 43-4111 |
| Janitors & Clean, Ex Maids & Housekeep Cleaners | 431 | 37-2011 |
| Jewelers & Precious Stone & Metal Workers | 787 | 51-9071 |
| Job Printers | 742 | 51-5021 |
| Judges, Magistrate Judges, & Magistrates | 196 | 23-1023 |
| Kindergarten Teachers, Except Special Education | 243 | 25-2012 |
| Laborers & Freight, Stock, & Material Movers, Hand | 850 | 53-7062 |
| Landscape Architects | 91 | 17-1012 |
| Landscaping & Groundskeeping Workers | 435 | 37-3011 |
| Lathe & Turn Mach Tool Set, Ops, & Tend, Metl & Plas | 722 | 51-4034 |
| Laundry & Dry-Cleaning Workers | 746 | 51-6011 |
| Law Clerks | 199 | 23-2092 |
| Law Teachers, Postsecondary | 229 | 25-1112 |
| Lawyers | 193 | 23-1011 |
| Lay-Out Workers, Metal & Plastic | 736 | 51-4192 |
| Legal & Related Workers, All Other | 202 | 23-9099 |
| Legal Occupations | 192 | 23-0000 |
| Legal Secretaries | 543 | 43-6012 |
| Legal Support Workers, All Other | 201 | 23-2099 |
| Legislators | 6 | 11-1031 |
| Librarians | 260 | 25-4021 |
| Library Assistants, Clerical | 521 | 43-4121 |
| Library Science Teachers, Postsecondary | 227 | 25-1082 |
| Library Technicians | 261 | 25-4031 |
| Library, Museum, Training, & Oth Ed Wrkrs, All Other | 267 | 25-9199 |
| Licensed Practical & Licensed Vocational Nurses | 358 | 29-2061 |
| Life Scientists, All Other | 140 | 19-1099 |
| Life, Physical, & Social Science Occupations | 127 | 19-0000 |
| Life, Physical, & Social Science Techs, All Other | 172 | 19-4099 |
| Lifeguards, Ski Patrol, & Oth Rec Protect Serv Wrkrs | 407 | 33-9092 |
| Loading Machine Operators, Underground Mining | 846 | 53-7033 |
| Loan Counselors | 64 | 13-2071 |
| Loan Interviewers & Clerks | 522 | 43-4131 |
| Loan Officers | 65 | 13-2072 |
| Locker Room, Coatroom, & Dressing Room Attend | 453 | 39-3093 |
| Locksmiths & Safe Repairers | 688 | 49-9094 |
| Locomotive Engineers | 824 | 53-4011 |
| Locomotive Firers | 825 | 53-4012 |
| Lodging Managers | 31 | 11-9081 |
| Log Graders & Scalers | 574 | 45-4023 |
| Logging Equipment Operators | 573 | 45-4022 |
| Logging Workers, All Other | 575 | 45-4029 |
| Logisticians | 52 | 13-1081 |
| Machine Feeders & Offbearers | 851 | 53-7063 |
| Machinists | 724 | 51-4041 |
| Maids & Housekeeping Cleaners | 432 | 37-2012 |
| Mail Clerks & Mail Mach Ops, Ex Postal Service | 551 | 43-9051 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Maintenance & Repair Workers, General | 674 | 49-9042 |
| Maintenance Workers, Machinery | 675 | 49-9043 |
| Makeup Artists, Theatrical & Performance | 460 | 39-5091 |
| Management Analysts | 53 | 13-1111 |
| Management Occupations | 3 | 11-0000 |
| Management, Bus. & Financial Occs, All Other | 69 | 11-13-9999 |
| Management, Business, & Financial Occupations | 2 | 11-13-0000 |
| Managers, All Other | 37 | 11-9199 |
| Manicurists & Pedicurists | 461 | 39-5092 |
| Manufactured Building & Mobile Home Installers | 689 | 49-9095 |
| Marine Engineers & Naval Architects | 106 | 17-2121 |
| Market Research Analysts | 151 | 19-3021 |
| Marketing Managers | 8 | 11-2021 |
| Marriage & Family Therapists | 176 | 21-1013 |
| Massage Therapists | 379 | 31-9011 |
| Material Moving Workers, All Other | 859 | 53-7199 |
| Materials Engineers | 107 | 17-2131 |
| Materials Scientists | 145 | 19-2032 |
| Mathematical Science Occupations, All Other | 87 | 15-2099 |
| Mathematical Science Teachers, Postsecondary | 206 | 25-1022 |
| Mathematical Technicians | 86 | 15-2091 |
| Mathematicians | 83 | 15-2021 |
| Meat, Poultry, & Fish Cutters & Trimmers | 708 | 51-3022 |
| Mechanical Door Repairers | 669 | 49-9011 |
| Mechanical Drafters | 115 | 17-3013 |
| Mechanical Engineering Technicians | 123 | 17-3027 |
| Mechanical Engineers | 108 | 17-2141 |
| Media & Communication Equip. Workers, All Other | 312 | 27-4099 |
| Media & Communication Workers, All Other | 304 | 27-3099 |
| Medical & Clinical Laboratory Technicians | 345 | 29-2012 |
| Medical & Clinical Laboratory Technologists | 344 | 29-2011 |
| Medical & Health Services Managers | 32 | 11-9111 |
| Medical & Public Health Social Workers | 181 | 21-1022 |
| Medical Appliance Technicians | 789 | 51-9082 |
| Medical Assistants | 381 | 31-9092 |
| Medical Equipment Preparers | 382 | 31-9093 |
| Medical Equipment Repairers | 681 | 49-9062 |
| Medical Records & Health Information Technicians | 359 | 29-2071 |
| Medical Scientists, Except Epidemiologists | 139 | 19-1042 |
| Medical Secretaries | 544 | 43-6013 |
| Medical Transcriptionists | 383 | 31-9094 |
| Meeting & Convention Planners | 54 | 13-1121 |
| Mental Health & Substance Abuse Social Workers | 182 | 21-1023 |
| Mental Health Counselors | 177 | 21-1014 |
| Merchandise Displayers & Window Trimmers | 279 | 27-1026 |
| Metal Workers & Plastic Workers, All Other | 739 | 51-4199 |
| Metal-Refining Furnace Operators & Tenders | 725 | 51-4051 |
| Meter Readers, Utilities | 534 | 43-5041 |
| Microbiologists | 133 | 19-1022 |
| Mid School Teachers, Ex Special & Vocational Ed | 245 | 25-2022 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Military Enlisted Tactical Operations & Air/Weapons Spe | 881 | 55-3019 |
| Military Officer Special & Tactical Operations Leader | 869 | 55-1019 |
| Military Specific Occupations | 861 | 55-0000 |
| Mill & Plan Mach Set, Ops, & Tend, Metal & Plastic | 723 | 51-4035 |
| Millwrights | 676 | 49-9044 |
| Mine Cutting & Channeling Machine Operators | 632 | 47-5042 |
| Mining & Geological Engrs, Incl Mining Safety Engrs | 109 | 17-2151 |
| Mining Machine Operators, All Other | 633 | 47-5049 |
| Mix & Blend Mach Setters, Ops, & Tenders | 781 | 51-9023 |
| Mobile Heavy Equipt Mechanics, Except Engines | 660 | 49-3042 |
| Model Makers, Metal & Plastic | 727 | 51-4061 |
| Model Makers, Wood | 763 | 51-7031 |
| Models | 493 | 41-9012 |
| Mold, Core, & Cast Mach, Set, Ops & Tend, Metl & Plas | 730 | 51-4072 |
| Molders, Shapers, & Casters, Except Metal & Plastic | 802 | 51-9195 |
| Motion Picture Projectionists | 449 | 39-3021 |
| Motor Vehicle Operators, All Other | 823 | 53-3099 |
| Motorboat Mechanics | 662 | 49-3051 |
| Motorboat Operators | 833 | 53-5022 |
| Motorcycle Mechanics | 663 | 49-3052 |
| Mult MachTool Set, Ops, & Tend,Metal & Plastic | 731 | 51-4081 |
| Multi-Media Artists & Animators | 272 | 27-1014 |
| Museum Technicians & Conservators | 258 | 25-4013 |
| Music Directors & Composers | 290 | 27-2041 |
| Musical Instrument Repairers & Tuners | 682 | 49-9063 |
| Musicians & Singers | 291 | 27-2042 |
| Natural Sciences Managers | 33 | 11-9121 |
| Network & Computer Systems Administrators | 79 | 15-1071 |
| Network Systems & Data Communications Analysts | 80 | 15-1081 |
| New Accounts Clerks | 523 | 43-4141 |
| News Analysts, Reporters & Corres, All Other | 298 | 27-3029 |
| Nonfarm Animal Caretakers | 445 | 39-2021 |
| Nuclear Engineers | 110 | 17-2161 |
| Nuclear Medicine Technologists | 349 | 29-2033 |
| Nuclear Power Reactor Operators | 768 | 51-8011 |
| Nuclear Technicians | 167 | 19-4051 |
| Numerical Tool & Process Control Programmers | 715 | 51-4012 |
| Nursing Aides, Orderlies, & Attendants | 373 | 31-1012 |
| Nursing Instructors & Teachers, Postsecondary | 225 | 25-1072 |
| Obstetricians & Gynecologists | 326 | 29-1064 |
| Occupation Unknown | 882 | 99-9999 |
| Occupational Health & Safety Specialists | 363 | 29-9011 |
| Occupational Health & Safety Technicians | 364 | 29-9012 |
| Occupational Therapist Aides | 376 | 31-2012 |
| Occupational Therapist Assistants | 375 | 31-2011 |
| Occupational Therapists | 335 | 29-1122 |
| Occupl Hlth & Safety Specs & Techs, All Other | 365 | 29-9019 |
| Office & Administrative Support Occupations | 500 | 43-0000 |
| Office & Administrative Support Workers, All Other | 556 | 43-9199 |
| Office Clerks, General | 552 | 43-9061 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Office Machine Operators, Except Computer | 553 | 43-9071 |
| Operating Engineers & Oth Const Equipment Ops | 592 | 47-2073 |
| Operations Research Analysts | 84 | 15-2031 |
| Ophthalmic Laboratory Technicians | 790 | 51-9083 |
| Opticians, Dispensing | 360 | 29-2081 |
| Optometrists | 321 | 29-1041 |
| Oral & Maxillofacial Surgeons | 316 | 29-1022 |
| Order Clerks | 524 | 43-4151 |
| Orthodontists | 317 | 29-1023 |
| Orthotists & Prosthetists | 361 | 29-2091 |
| Outdoor Power Equipt & Other Small Eng Mechanic | 664 | 49-3053 |
| Packaging & Filling Machine Operators & Tenders | 791 | 51-9111 |
| Packers & Packagers, Hand | 852 | 53-7064 |
| Painters, Construction & Maintenance | 600 | 47-2141 |
| Painters, Transportation Equipment | 793 | 51-9122 |
| Painting, Coating, & Decorating Workers | 794 | 51-9123 |
| Paper Goods Machine Setters, Ops, & Tenders | 803 | 51-9196 |
| Paperhanglers | 601 | 47-2142 |
| Paralegals & Legal Assistants | 197 | 23-2011 |
| Parking Enforcement Workers | 399 | 33-3041 |
| Parking Lot Attendants | 837 | 53-6021 |
| Parts Salespersons | 483 | 41-2022 |
| Patternmakers, Metal & Plastic | 728 | 51-4062 |
| Patternmakers, Wood | 764 | 51-7032 |
| Paving, Surfacing, & Tamping Equipment Operators | 590 | 47-2071 |
| Payroll & Timekeeping Clerks | 509 | 43-3051 |
| Pediatricians, General | 327 | 29-1065 |
| Personal & Home Care Aides | 471 | 39-9021 |
| Personal Care & Service Occupations | 440 | 39-0000 |
| Personal Care & Service Workers, All Other | 475 | 39-9099 |
| Personal Financial Advisors | 61 | 13-2052 |
| Pest Control Workers | 434 | 37-2021 |
| Pesticide Handlers, Spray, & Applicators, Vegetation | 436 | 37-3012 |
| Petrol Pump System Ops, Refinery Ops, & Gaugers | 775 | 51-8093 |
| Petroleum Engineers | 111 | 17-2171 |
| Pharmacists | 322 | 29-1051 |
| Pharmacy Aides | 384 | 31-9095 |
| Pharmacy Technicians | 353 | 29-2052 |
| Philosophy & Religion Teachers, Postsecondary | 236 | 25-1126 |
| Photographers | 309 | 27-4021 |
| Photographic Process Workers | 795 | 51-9131 |
| Photographic Processing Machine Operators | 796 | 51-9132 |
| Physical Scientists, All Other | 149 | 19-2099 |
| Physical Therapist Aides | 378 | 31-2022 |
| Physical Therapist Assistants | 377 | 31-2021 |
| Physical Therapists | 336 | 29-1123 |
| Physician Assistants | 331 | 29-1071 |
| Physicians & Surgeons, All Other | 330 | 29-1069 |
| Physicists | 142 | 19-2012 |
| Physics Teachers, Postsecondary | 215 | 25-1054 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Pile-Driver Operators | 591 | 47-2072 |
| Pipelayers | 602 | 47-2151 |
| Plant & System Operators, All Other | 776 | 51-8099 |
| Plasterers & Stucco Masons | 604 | 47-2161 |
| Plate & Coat Mach Set, Ops, & Tend, Metal & Plastic | 737 | 51-4193 |
| Plumbers, Pipefitters, & Steamfitters | 603 | 47-2152 |
| Podiatrists | 332 | 29-1081 |
| Police & Sheriff's Patrol Officers | 400 | 33-3051 |
| Police, Fire, & Ambulance Dispatchers | 532 | 43-5031 |
| Political Science Teachers, Postsecondary | 220 | 25-1065 |
| Political Scientists | 161 | 19-3094 |
| Postal Serv Mail Sort, Processors, & Processing | 537 | 43-5053 |
| Postal Service Clerks | 535 | 43-5051 |
| Postal Service Mail Carriers | 536 | 43-5052 |
| Postmasters & Mail Superintendents | 34 | 11-9131 |
| Postsecondary Teachers, All Other | 241 | 25-1199 |
| Pourers & Casters, Metal | 726 | 51-4052 |
| Power Distributors & Dispatchers | 769 | 51-8012 |
| Power Plant Operators | 770 | 51-8013 |
| Precision Instrument & Equipmt Repairers, All Other | 684 | 49-9069 |
| Prepress Technicians & Workers | 743 | 51-5022 |
| Preschool Teachers, Except Special Education | 242 | 25-2011 |
| Pressers, Textile, Garment, & Related Materials | 747 | 51-6021 |
| Printing Machine Operators | 744 | 51-5023 |
| Printing Workers, All Other | 745 | 51-5099 |
| Private Detectives & Investigators | 403 | 33-9021 |
| Probation Offcrs & Correctional Treatment Specialis | 185 | 21-1092 |
| Procurement Clerks | 510 | 43-3061 |
| Producers & Directors | 284 | 27-2012 |
| Production Occupations | 694 | 51-0000 |
| Production Workers, All Other | 806 | 51-9199 |
| Production, Planning, & Expediting Clerks | 538 | 43-5061 |
| Professional & Related Occupations | 70 | 15-29-0000 |
| Professional & Related Occupations | 88 | 15-29-0000 |
| Professional & Related Occupations, All Other | 369 | 15-29-9999 |
| Proofreaders & Copy Markers | 554 | 43-9081 |
| Property, Real Estate, & Community Assn Mgrs | 35 | 11-9141 |
| Prosthodontists | 318 | 29-1024 |
| Protective Service Occupations | 387 | 33-0000 |
| Protective Service Workers, All Other | 408 | 33-9099 |
| Psychiatric Aides | 374 | 31-1013 |
| Psychiatric Technicians | 354 | 29-2053 |
| Psychiatrists | 328 | 29-1066 |
| Psychologists, All Other | 155 | 19-3039 |
| Psychology Teachers, Postsecondary | 221 | 25-1066 |
| Public Address System & Other Announcers | 294 | 27-3012 |
| Public Relations Managers | 10 | 11-2031 |
| Public Relations Specialists | 299 | 27-3031 |
| Pump Operators, Except Wellhead Pumpers | 854 | 53-7072 |
| Purch Agents, Ex Wholesale, Retail, & Farm Prods | 42 | 13-1023 |

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|---|-------------|---------------------|
| Purchasing Agents & Buyers, Farm Products | 40 | 13-1021 |
| Purchasing Managers | 18 | 11-3061 |
| Radar & Sonar Technicians | 879 | 55-3017 |
| Radiation Therapists | 337 | 29-1124 |
| Radio & Television Announcers | 293 | 27-3011 |
| Radio Mechanics | 643 | 49-2021 |
| Radio Operators | 307 | 27-4013 |
| Radiologic Technologists & Technicians | 350 | 29-2034 |
| Rail Car Repairers | 661 | 49-3043 |
| Rail Transportation Workers, All Other | 830 | 53-4099 |
| Rail Yard Engineers, Dinkey Operators, & Hostlers | 826 | 53-4013 |
| Railroad Brake, Signal, & Switch Operators | 827 | 53-4021 |
| Railroad Conductors & Yardmasters | 828 | 53-4031 |
| Rail-Track Laying & Maintenance Equipment Ops | 621 | 47-4061 |
| Real Estate Brokers | 494 | 41-9021 |
| Real Estate Sales Agents | 495 | 41-9022 |
| Receptionists & Information Clerks | 526 | 43-4171 |
| Recreation & Fitness Studies Teachrs, Postsecond | 239 | 25-1193 |
| Recreation Workers | 473 | 39-9032 |
| Recreational Therapists | 338 | 29-1125 |
| Recreational Vehicle Service Technicians | 666 | 49-3092 |
| Refractory Materials Repairers, Ex Brickmasons | 677 | 49-9045 |
| Refuse & Recyclable Material Collectors | 856 | 53-7081 |
| Registered Nurses | 333 | 29-1111 |
| Rehabilitation Counselors | 178 | 21-1015 |
| Reinforcing Iron & Rebar Workers | 605 | 47-2171 |
| Religious Workers, All Other | 190 | 21-2099 |
| Reporters & Correspondents | 297 | 27-3022 |
| Reservation & Trans Ticket Agents & Travel Clerks | 527 | 43-4181 |
| Residential Advisors | 474 | 39-9041 |
| Respiratory Therapists | 339 | 29-1126 |
| Respiratory Therapy Technicians | 355 | 29-2054 |
| Retail Salespersons | 484 | 41-2031 |
| Riggers | 690 | 49-9096 |
| Rock Splitters, Quarry | 634 | 47-5051 |
| Rolling Mach Setters, Ops, & Tends, Metal & Plastic | 718 | 51-4023 |
| Roof Bolters, Mining | 635 | 47-5061 |
| Roofers | 606 | 47-2181 |
| Rotary Drill Operators, Oil & Gas | 627 | 47-5012 |
| Roustabouts, Oil & Gas | 636 | 47-5071 |
| Sailors & Marine Oilers | 831 | 53-5011 |
| Sales & Related Occupations | 477 | 41-0000 |
| Sales & Related Workers, All Other | 499 | 41-9099 |
| Sales Engineers | 496 | 41-9031 |
| Sales Managers | 9 | 11-2022 |
| Sales Representatives, Services, All Other | 489 | 41-3099 |
| Sales Reps, Whlesale & Mfg, Tech & Scientific Prods | 490 | 41-4011 |
| Sales Reps, Whlsale & Mfg, Ex Tech & Scientific Prods | 491 | 41-4012 |
| Sawing Mach Setters, Ops, & Tenders, Wood | 765 | 51-7041 |
| Secondary School Teachers, Ex Special & Voc Ed | 247 | 25-2031 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Secretaries, Admin Assist, & Oth Off Suprt Wrkers, All O | 557 | 43-9999 |
| Secretaries, Except Legal, Medical, & Executive | 545 | 43-6014 |
| Securities, Commodities, & Financial Serv Sales Agts | 487 | 41-3031 |
| Security & Fire Alarm Systems Installers | 652 | 49-2098 |
| Security Guards | 405 | 33-9032 |
| Segmental Pavers | 623 | 47-4091 |
| Self-Enrichment Education Teachers | 253 | 25-3021 |
| Semiconductor Processors | 797 | 51-9141 |
| Separate, Filter, Clarify, Precipitate, & Still Mach Se | 778 | 51-9012 |
| Septic Tank Servicers & Sewer Pipe Cleaners | 622 | 47-4071 |
| Service Occupations | 370 | 31-39-0000 |
| Service Occupations, All Other | 476 | 31-39-9999 |
| Service Station Attendants | 838 | 53-6031 |
| Service Unit Operators, Oil, Gas, & Mining | 628 | 47-5013 |
| Set & Exhibit Designers | 280 | 27-1027 |
| Sewers, Hand | 751 | 51-6051 |
| Sewing Machine Operators | 748 | 51-6031 |
| Shampooers | 462 | 39-5093 |
| Sheet Metal Workers | 607 | 47-2211 |
| Ship Engineers | 834 | 53-5031 |
| Shipping, Receiving, & Traffic Clerks | 539 | 43-5071 |
| Shoe & Leather Workers & Repairers | 749 | 51-6041 |
| Shoe Machine Operators & Tenders | 750 | 51-6042 |
| Shuttle Car Operators | 857 | 53-7111 |
| Signal & Track Switch Repairers | 691 | 49-9097 |
| Skin Care Specialists | 463 | 39-5094 |
| Slaughterers & Meat Packers | 709 | 51-3023 |
| Slot Key Persons | 442 | 39-1012 |
| Social & Community Service Managers | 36 | 11-9151 |
| Social & Human Service Assistants | 186 | 21-1093 |
| Social Science Research Assistants | 168 | 19-4061 |
| Social Sciences Teachers, Postsecondary, All Other | 223 | 25-1069 |
| Social Scientists & Related Workers, All Other | 162 | 19-3099 |
| Social Work Teachers, Postsecondary | 230 | 25-1113 |
| Social Workers, All Other | 183 | 21-1029 |
| Sociologists | 156 | 19-3041 |
| Sociology Teachers, Postsecondary | 222 | 25-1067 |
| Soil & Plant Scientists | 130 | 19-1013 |
| Sound Engineering Technicians | 308 | 27-4014 |
| Special Ed Teachers, Preschool, Kindergarten, & | 249 | 25-2041 |
| Special Education Teachers, Middle School | 250 | 25-2042 |
| Special Education Teachers, Secondary School | 251 | 25-2043 |
| Special Forces | 880 | 55-3018 |
| Special Forces Officers | 868 | 55-1017 |
| Speech-Language Pathologists | 340 | 29-1127 |
| Stationary Engineers & Boiler Operators | 771 | 51-8021 |
| Statistical Assistants | 555 | 43-9111 |
| Statisticians | 85 | 15-2041 |
| Stock Clerks & Order Fillers | 540 | 43-5081 |
| Stonemasons | 581 | 47-2022 |

Alphabetical Index of Occupations

| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|--|-------------|---------------------|
| Structural Iron & Steel Workers | 608 | 47-2221 |
| Structural Metal Fabricators & Fitters | 701 | 51-2041 |
| Substance Abuse & Behavioral Disorder Counselors | 174 | 21-1011 |
| Subway & Streetcar Operators | 829 | 53-4041 |
| Surgeons | 329 | 29-1067 |
| Surgical Technologists | 356 | 29-2055 |
| Survey Researchers | 152 | 19-3022 |
| Surveying & Mapping Technicians | 125 | 17-3031 |
| Surveyors | 93 | 17-1022 |
| Switchboard Operators, Including Answering Service | 502 | 43-2011 |
| Tailors, Dressmakers, & Custom Sewers | 752 | 51-6052 |
| Tank Car, Truck, & Ship Loaders | 858 | 53-7121 |
| Tapers | 594 | 47-2082 |
| Tax Examiners, Collectors, & Revenue Agents | 66 | 13-2081 |
| Tax Preparers | 67 | 13-2082 |
| Taxi Drivers & Chauffeurs | 822 | 53-3041 |
| Teacher Assistants | 265 | 25-9041 |
| Teachers & Instructors, All Other | 254 | 25-3099 |
| Teachers, Primary, Secondary, & Adult, All Other | 255 | 25-3999 |
| Team Assemblers | 703 | 51-2092 |
| Technical Writers | 301 | 27-3042 |
| Telecomm Equipt Install & Repair, Ex Line Install | 644 | 49-2022 |
| Telecommunications Line Installers & Repairers | 679 | 49-9052 |
| Telemarketers | 497 | 41-9041 |
| Telephone Operators | 503 | 43-2021 |
| Tellers | 511 | 43-3071 |
| Terrazzo Workers & Finishers | 588 | 47-2053 |
| Textile Bleaching & Dyeing Mach Ops & Tenders | 753 | 51-6061 |
| Textile Cutting Machine Setters, Ops, & Tenders | 754 | 51-6062 |
| Textile Knit & Weave Mach Setters, Ops & Tenders | 755 | 51-6063 |
| Textile Wind, Twist, & Draw Out Mach Set, Ops & Tend | 756 | 51-6064 |
| Textile, Apparel, & Furnishings Workers, All Other | 760 | 51-6099 |
| Therapists, All Other | 341 | 29-1129 |
| Tile & Marble Setters | 586 | 47-2044 |
| Timing Device Assemblers, Adjusters, & Calibrators | 704 | 51-2093 |
| Tire Builders | 804 | 51-9197 |
| Tire Repairers & Changers | 667 | 49-3093 |
| Title Examiners, Abstractors, & Searchers | 200 | 23-2093 |
| Tool & Die Makers | 732 | 51-4111 |
| Tool Grinders, Filers, & Sharpeners | 738 | 51-4194 |
| Tour Guides & Escorts | 466 | 39-6021 |
| Traffic Technicians | 839 | 53-6041 |
| Training & Development Managers | 15 | 11-3042 |
| Training & Development Specialists | 50 | 13-1073 |
| Trans & Material Moving Occupations, All Other | 860 | 53-9999 |
| Trans Attendants, Ex Flight Attendants & Bag Porters | 469 | 39-6032 |
| Transit & Railroad Police | 401 | 33-3052 |
| Transportation & Material Moving Occupations | 807 | 53-0000 |
| Transportation Inspectors | 840 | 53-6051 |
| Transportation Workers, All Other | 841 | 53-6099 |

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| OCCUPATION | LINE NUMBER | CALIFORNIA SOC CODE |
|---|-------------|---------------------|
| Transportation, Storage, & Distribution Managers | 19 | 11-3071 |
| Travel Agents | 488 | 41-3041 |
| Travel Guides | 467 | 39-6022 |
| Tree Trimmers & Pruners | 437 | 37-3013 |
| Truck Drivers, Heavy & Tractor-Trailer | 820 | 53-3032 |
| Truck Drivers, Light or Delivery Services | 821 | 53-3033 |
| Umpires, Referees, & Other Sports Officials | 287 | 27-2023 |
| Upholsterers | 759 | 51-6093 |
| Urban & Regional Planners | 157 | 19-3051 |
| Ushers, Lobby Attendants, & Ticket Takers | 450 | 39-3031 |
| Veh & Mobile Equipt Mechs, Install, & Repair, All Oth | 668 | 49-3099 |
| Veterinarians | 342 | 29-1131 |
| Veterinary Assistants & Lab Animal Caretakers | 385 | 31-9096 |
| Veterinary Technologists & Technicians | 357 | 29-2056 |
| Vocational Education Teachers, Middle School | 246 | 25-2023 |
| Vocational Education Teachers, Postsecondary | 240 | 25-1194 |
| Vocational Education Teachers, Secondary School | 248 | 25-2032 |
| Waiters & Waitresses | 422 | 35-3031 |
| Watch Repairers | 683 | 49-9064 |
| Water & Liquid Waste Treat Plant & System Ops | 772 | 51-8031 |
| Water Transportation Workers, All Other | 835 | 53-5099 |
| Weigh, Measure, Check, & Sample, Recordkeep | 541 | 43-5111 |
| Weld, Solder, & Braze Mach Setters, Ops, & Tenders | 734 | 51-4122 |
| Welders, Cutters, Solderers, & Brazers | 733 | 51-4121 |
| Wellhead Pumpers | 855 | 53-7073 |
| Wholesale & Retail Buyers, Except Farm Products | 41 | 13-1022 |
| Woodwork Mach Setters, Ops, & Tenders, Ex Sawing | 766 | 51-7042 |
| Woodworkers, All Other | 767 | 51-7099 |
| Word Processors & Typists | 548 | 43-9022 |
| Writers & Authors | 302 | 27-3043 |
| Zoologists & Wildlife Biologists | 134 | 19-1023 |